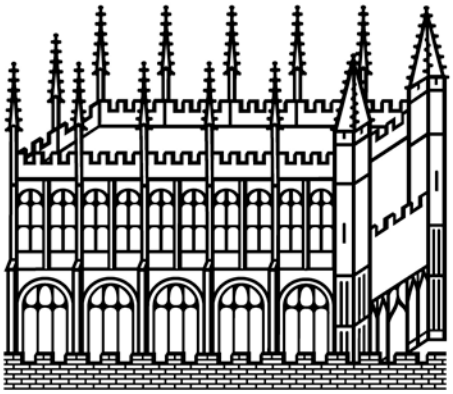

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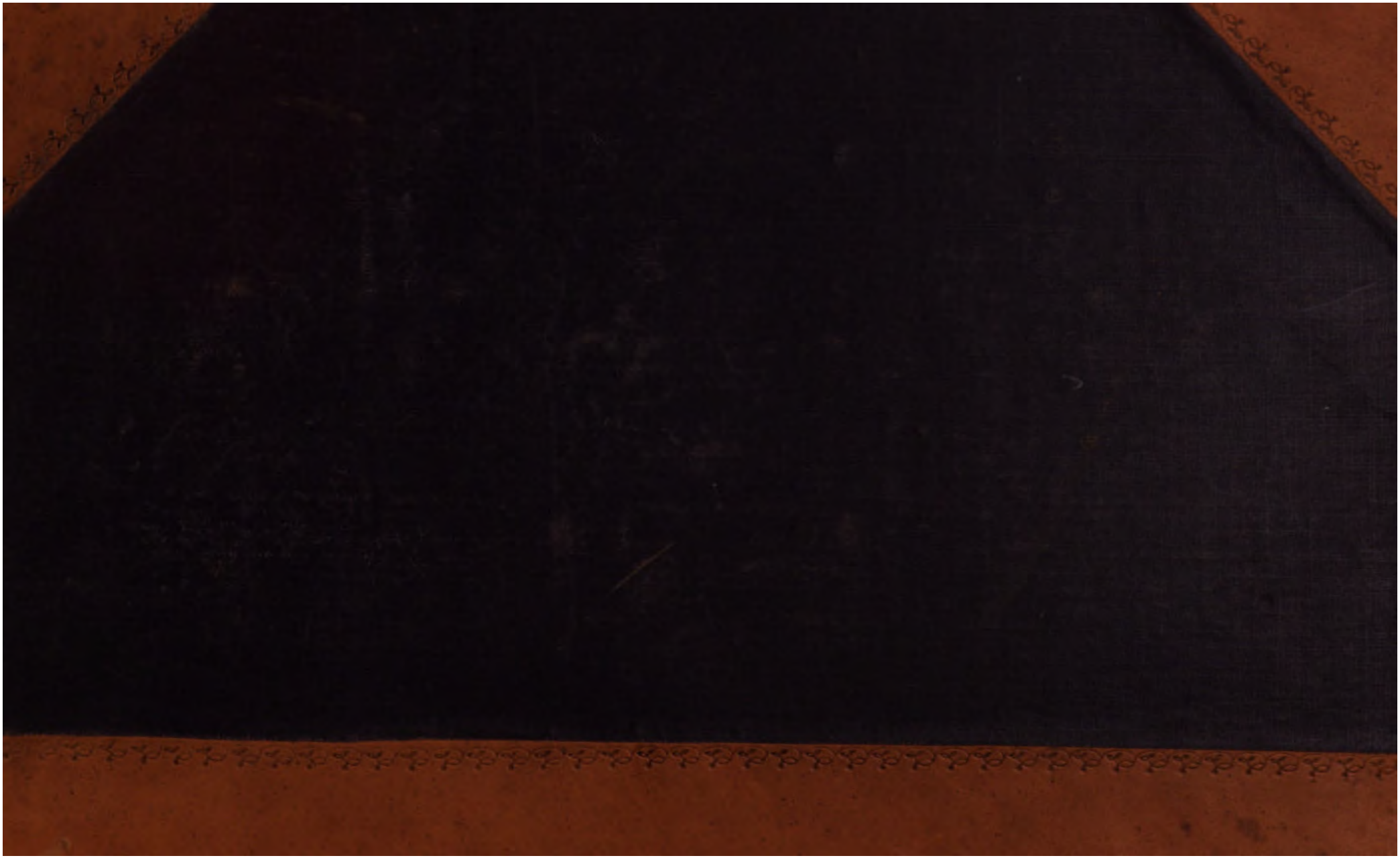

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THE

LONDON ENCYCLOPÆDIA.

CUSTOM-HOUSE, an office established by the authority of the king, in maritime cities, or port-towns, for the receipt and management of the customs and duties of importation and exportation, imposed on merchandise, and regulated by a book of rates. And here we were about to digest, for the benefit of our readers, a fair portion of the goodly folio account of the building of the new custom-house of this metropolis; but the fabric itself, alas! has given way in almost every part of its foundation, before our humble narrative is completed! We must, therefore, hope, that under the word LONDON, no similar disappointment may prevent our recurring to this subject.

CUSTOS BREVIUM, the principal clerk belonging to the court of common pleas, whose business it is to receive and keep all the writs made returnable in that court, filing every return by itself; and, at the end of each term, to receive prothonotaries of all the records of the nisi prius, filed the posteas. The posteas are first brought in by the clerks of assize, of every circuit, to that prothonotary who entered the issue in the causes, in order to enter judgment; and after the prothonotary has entered the verdict and judgment into the rolls of the court, he delivers them over to the custos brevium, who binds them into a bundle. The custos brevium also makes entries of writs of covenant, and the concord upon every line; he likewise makes out exemplifications and copies of all writs and records in his office, and of all fines levied, which, being engrossed, are divided between him and the chirographer, which last keeps the writ of covenant and the note, and the former the concord and foot of the fine. The custos brevium is appointed by the king's letters patent.

CUSTOS ROTULORUM, an officer who has the custody of the rolls and records of the sessions of peace, and also of the commission of the peace itself. He is usually a nobleman, and always a justice of the peace, of the quorum, in the county where he is appointed. This officer is appointed by writing under the king's sign manual, being the lord chancellor's warrant to put them in commission. He may execute his office by a deputy, and is empowered to appoint the clerk of the peace; but he is prohibited from selling his office, under divers penalties.

CUSTOS SPIRITUALIUM, he that exercises the spiritual jurisdiction of a diocese, during the vacancy of any see, which, by the canon law, belongs to the dean and chapter; but at present, in England, to the archbishop of the province by prescription

CUSTOS TEMPORALIUM, the person to whom a vacant see or abbey was given by the king as supreme lord. His office was, as steward of the goods and profits, to give an account to the escheator, who did the like to the exchequer.

CU'STREL, *n. s.* Fr. *coustillier*. A buckler-bearer; a vesel for holding wine. The word is sometimes written coistrel.

> Every one had an archer, a demi-lance, and a *custrel*. *Lord Herbert.*

CUSTRIN, a fortified town of Prussia, the capital of the New Mark of Brandenburgh, is situated in a plain at the junction of the Wartha and the Oder. The town though small has spacious suburbs, and contains 4500 inhabitants. It is encompassed by extensive morasses, which add to its strength; a fortified dike also commences at one of the suburbs, and is continued for the space of three miles by means of thirty-six bridges, across a succession of [illegible] ground. In the month of August, 1758, this place was bombarded and laid in ashes by the Russians, but afterwards rebuilt in a style of great regularity. It is forty-eight miles east of Berlin.

CUT, *v. a., v. n.* & *n. s.*
CUTTER, *n. s.*
CUTTING, *n. s.*
CUTTER-OFF, *n. s.*
CUT-THROAT, *n. s.* & *adj.*
CUT-PURSE, *n. s.*

Fr. *couper, couteau*; Sans. *kutan*. West Goth. *kota*, κοπτω.—Few words have more shades of meaning than to cut, but in all of them division, producing, in some way or other, a solution of continuity, is expressed or implied. To cut is, to penetrate with a sharp instrument; to hew; to sculpture; to form by cutting; to divide by passing through; to pierce with an uneasy sensation; to divide packs of cards; to intersect; to castrate; to avoid a person, or pretend not to see or know him; to make way by dividing; to perform the operation of lithotomy. It obtains many additional meanings from its conjunction with *down*, *off*, *out*, *short*, *up*, and *in*. To cut down is, to fell; to level with the earth by a blow from a sharp instrument; to diminish the amount of any demand; to excel; to overpower. To cut off is, to separate by cutting; to extirpate; to bring to an untimely death; to rescind; to take away; to intercept; to put an end to; to obviate; to withhold; to preclude; to interrupt; to abbreviate. To cut out is, to shape; to scheme; to adopt; to debar; to excel. To cut short is, to interrupt; to abridge. To cut up is, to divide an animal, or some article of animal food, into convenient parts; to eradicate. To cut in is a phrase used in card-playing, particularly at whist, when the cut made by the parties determines who are to be the players. To cut a caper is to dance. The meanings of the noun are also numerous. It denotes the action of a sharp instrument; the separation made by

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such an instrument; an incised wound; an artificial channel; a part cut off from the rest; a small particle; a lot made by cutting into unequal portions, a stick, straw, or bit of paper, which portions are held between the finger and thumb, while another draws the lot; a near passage, which saves distance, by cutting off an angle; an impression taken from an engraving on wood or copper; the plate on which the drawing is engraved; the dividing of a pack of cards; anciently, a fool or cully; a gelding. Cut and long tail is a proverbial expression for all kinds of men. The participial adjective, cut, signifies prepared for use, in which case it is joined with *dry;* rather the worse for liquor; hurt in the feeling. Cut and come again is a trivial expression, denoting that there is an abundance. Cutter is the agent that cuts any thing; a small swift-going vessel; the incisores, or cutting teeth; an officer in the exchequer; a ruffian. Cutter off means a destroyer. Cutting is, a piece cut off; an incision; a caper, but this is obsolete; division, as of a pack of cards. Cut-purse is a thief; cut-throat a murderer; a butcher of men; the animal which is sometimes miscalled a hero. For CUTLERY, see the article.

And they did beat the gold into thin plates, and *cut* it into wires. *Exod.* xxxix. 3.

And they caught him, and *cut off* his thumbs. *Jud.* i. 6.

Thy servants can skill to *cut* timber in Lebanon. 2 *Chron.* ii.

Who *cut up* mallows by the bushes and juniper-roots for their meat. *Job* xxx. 4.

A bowe in honde and arowis had she,
Her clothis *cuttid* were unto the kne.
Chaucer. The Legende of Dido.

Right as a sword forcutteth and forkerveth
An arme atwo, my dere son! right so
A tonge *cutteth* friendship all atwo.
Id. Cant. Tales.

Now draweth *cutte* or that ye forther twinne;
He which that hath the shortest shal beginne.
Id. Prol. Cant. Tales.

The *cotelere* dwellith in this town that made the same kuyff,
And for to prove the trowith he shall be here as blyve. *Id. Cant. Tales.*

Either with nimble wings to *cut* the skies,
When he them on his messages doth send,
Or on his own dred presence to attend.
Spenser. Hymn on Heavenly Love

But that same squire to whom she was more dere
Whenas he saw she should be *cut* in twaine,
Did yield she rather should with him remaine
Alive then to himself be shared dead.
Id. Faerie Queene.

Eftsoones her shallow ship away did slide
More swift than swallow sheres the liquid skye,
Withouten oare or pilot it to guide,
Or winged canvas with the wind to fly:
Only she turnd a pin, and by and by
It *cut* away upon the yielding wave. *Id.*

All Spain was first conquered by the Romans, and filled with colonies from them, which were still increased, and the native Spaniards still *cut off*.
Id. On Ireland.

It hath a number of short *cuts* or shreddings, which may be better called wishes than prayers. *Hooker.*

My lady Zelmane and my daughter Mopsa may draw *cuts*, and the shortest *cut* speak first. *Sidney.*

Why should a man, whose blood is warm within,
Sit like his grandsire *cut* in alabaster? *Shakspeare.*

Ah, *cut* my lace asunder,
That my great heart may have some scope to bear,
Or else I swoon with this dead killing news.
Id. Richard III.

He that *cuts off* twenty years of life,
Cuts off so many years of fearing death.
Id. Julius Cæsar.

By the pattern of mine own thoughts I *cut out* the purity of his. *Id. Winter's Tale.*

To have an open ear, a quick eye, and a nimble hand, is necessary for a *cutpurse*. *Id.*

Send her money, knight, if thou hast her not in the end, call me *cut*. *Id. Twelfth Night.*

Their clothes are after such a Pagan *cut* too,
That, sure, they've worn out Christendom.
Id. Henry VIII.

A paultry ring
That she did give, whose poesy was
For all the world like *cutler's* poetry
Upon a knife: love me, and leave me not.
Shakspeare.

At quintin he,
In honour of this bridaltee,
Hath challenged either wide countee:
Come *cut* and long tail; for there be
Six bachelors as bold as he.
Ben Jonson. Underwood.

Nor can good Myson wear on his left hand
A signet ring of Bristol diamond,
But he must *cut* his glove to shew his pride,
That his trim jewel might be better spyd. *Hall.*

The king of this island, a wise man and a great warrior, handled the matter so, as he *cut off* their land forces from their ships. *Bacon.*

It is no grace to a judge to shew quickness of conceit in *cutting off* evidence or counsel too short. *Id.*

I, for my part, do not like images *cut out* in juniper, or other garden-stuff: they be for children. *Id.*

The burning of the *cuttings* of vines, and casting them upon land, doth much good. *Id.*

All the timber whereof was *cut down* in the mountains of Cilicia. *Knolles.*

This great *cut* or ditch Sesostris the rich king of Egypt, and long after him Ptolemus Philadelphus, purposed to have made a great deal wider and deeper, and thereby to have let the Red Sea into the Mediterranean. *Id.*

Will you then suffer these robbers, *cut-throats*, base people, gathered out of all the corners of Christendom, to waste your countries, spoil your cities, murder your people, and trouble all your seas? *Id.*

If to take above fifty in the hundred be extremity, this in truth can be none other than *cut-throat* and abominable dealing. *Carew's Survey of Cornwall.*

In this form, according to his description, he is set forth in the prints or *cuts* of martyrs by Cevallerius.
Browne.

There is some help for all the defects of fortune; for if a man cannot attain to the length of his wishes, he may have his remedy by *cutting* of them shorter.
Cowley.

Presume not on thy God, whoe'er he be.
Thee he regards not, owns not, hath *cut off*
Quite from his people. *Milton's Agonistes.*

His tawny beard was th' equal grace
Both of his wisdom and his face;
In *cut* and dye so like a tile,
A sudden view it would beguile. *Hudibras.*

To *cut off* all further mediation and interposition, the king conjured him to give over all thoughts of excuse. *Clarendon.*

He chose no other instrument than an ordinary knife, which he bought of a common *cutler*. *Id.*

A man may have the stone, and it may be useful, more than indirectly and at a distance useful, to him to be *cut*; but yet this usefulness will not justify the most skilful surgeon in the world, by force to make him endure the pain and hazard of *cutting*; because he has no commission, no right, without the patient's own consent, to do so. *Locke.*

This doctrine *cuts up* all government by the roots. *Id.*

A man may as reasonably draw *cuts* for his tenets, and regulate his persuasion by the cast of die. *Id.*

The ignorant took heart to enter upon this great calling, and instead of their *cutting* their way to it through the knowledge of the tongues, the fathers, and councils, they have taken another and a shorter *cut*. *South.*

The boar's intemperance, and the note upon him afterwards, on the *cutting* him *up*, that he had no brains in his head, may be moralized into a sensual man. *L'Estrange.*

The molares, or grinders, are behind, nearest the centre of motion, because there is a greater strength or force required to chew the meat than to bite a piece; and the *cutters* before, that they may be ready to *cut off* a morsel from any solid food, to be transmitted to the grinders. *Ray on the Creation.*

And when two hearts were joined by mutual love,
The sword of justice *cuts* upon the knot,
And severs 'em for ever. *Dryden's Spanish Friar.*

Thus much he spoke, and more he would have said,
But the stern hero turned aside his head,
And *cut* him *short*. *Id. Æneid.*

The ruffian robbers by no justice aw'd,
And unpaid *cut-throat* soldiers are abroad;
Those venial souls, who, hardened in each ill,
To save complaints and prosecution, kill.
Id. Juvenal.

You know I am not *cut out* for writing a treatise, nor have a genius to pen any thing exactly. *Rymer.*

Supine they in their heaven remain,
Exempt from passion and from pain;
And frankly leave us, human elves,
To *cut* and shuffle for ourselves. *Prior.*

The man was *cut* to the heart with these consolations. *Addison.*

It may compose our unnatural feuds, and *cut off* frequent occasions of brutal rage and intemperance. *Id.*

Every man had *cut out* a place for himself in his own thoughts: I could reckon up in our army two or three lord-treasurers. *Id.*

A third desires you to observe well the toga on such a reverse, and asks you whether you can in conscience believe the sleeve of it to be of the true Roman *cut*. *Id.*

So great is his natural eloquence, that he *cuts down* the finest orator, and destroys the best contrived argument, as soon as ever he gets himself to be heard. *Id. Count Tariff.*

I am *cut out* from any thing but common acknowledgements, or common discourse *Pope.*

Before the whistling winds the vessels fly,
With rapid swiftness *cut* the liquid way,
And reach Gerestus at the point of day.
Id. Odyssey.

When the teeth are ready to *cut*, the upper part is bbed with hard substances, which infants, by a natural instinct, affect. *Arbuthnot.*

The antiquaries being but indifferent taylors, they wrangle prodigiously about the *cutting out* the toga. *Id. on Coins.*

How can the muse her aid impart,
Unskilled in all the terms of art?
Or in harmonious numbers put
The deal, the shuffle, and the *cut*. *Swift.*

Sets of phrases, *cut* and dry,
Evermore the tongue supply. *Id.*

If we could imagine a whole nation to be *cut-purses* and robbers, would there then be kept that square dealing and equity in such a monstrous den of thieves? *Bentley's Sermons.*

Sharp weapons, according to the force, *cut* into the bone many ways; which *cuts* are called sedes, and are reckoned among the fractures. *Wiseman's Surgery.*

Suppose a board to be ten foot long, and one broad, one *cut* is reckoned so many foot. *Mortimer's Husbandry.*

From the marrowless bones of these skeleton establishments, by the use of every sort of *cutting*, and of every sort of fretting tool, he flatters himself that he may chip and rasp an empirical alimentary powder, to diet into some similitude of health and substance the languishing chimeras of fraudulent reformation. *Burke.*

I am a son of Mars, who have been in many wars,
And show my *cuts* and scars wherever I come;
This here was for a wench, and that other in a trench,
When welcoming the French at the sound of the drum.
Burns.

He says you and your *cut-throats* have a plot upon his life, and swears he had rather see his daughter in a scarlet fever than in the arms of a soldier. *Sheridan.*

Her first thought was to *cut* off Juan's head;
Her second, to *cut* only his—acquaintance;
Her third, to ask him where he had been bred;
Her fourth, to rally him into repentance.
Byron. Don Juan.

Two casks of biscuit, and a keg of butter
Were all that could be thrown into the *cutter*. *Id.*

Cutting is particularly used in heraldry, where the shield is divided into two equal parts, from right to left, parallel to the horizon, or in the fesse way. The word is also applied to the honorable ordinaries, and even to animals and moveables, when they are divided equally the same way; so however, as that one moiety is color, the other metal. The ordinaries are said to be cut, couped, when they do not come full to the extremities of the shield.

Cutting, in painting, the laying one strong lively color over another, without any shade or softening. The cutting of colors has always a disagreeable effect.

Cutting, in surgery, denotes the operation of extracting the stone out of the bladder by the knife. See Lithotomy.

CUTTING, in the manege, is when the horse's feet interfere; or when with the shoe of one foot he beats off the skin from the pastern joints of another foot. This is more frequent in the hind feet than the fore: the cause is commonly bad shoeing.

CUTTING IN WOOD is a particular kind of sculpture or engraving; the invention of which, as well as that in copper, is ascribed to a goldsmith of Florence: but it is to Albert Durer and Lucas they are both indebted for their perfection. See ENGRAVING and PRINTING. Hugo da Carpi invented a manner of cutting in wood, by means of which the prints appeared as if painted in clair-obscure.

CUTTINGS, or slips, in gardening, the branches or sprigs of trees or plants, cut or slipped off to set again; which is done in any moist fine earth. The best season is from August to April; but care is to be taken, when it is done, that the sap be not too much in the top, lest the cut die before that part in the earth have root enough to support it: nor must it be too dry or scanty; the sap in the branches assisting it to take root. In providing the cuttings, such branches as have joints, knots, or burrs, are to be cut off two or three inches beneath them, and the leaves to be stripped off so far as they are set in the earth. Small top branches, of two or three years' growth, are fittest for this operation.

CUTCH, an extensive province of the south-western part of Hindostan, situated principally between the twenty-third and twenty-fourth degrees of north latitude. It is bounded to the north by a sandy desert and the province of Sindy; to the south by the gulf of Cutch; to the east by Gujrat, and to the west by Tatta, from which it is separated by the most eastern branch of the Indus. Its limits northward are not accurately defined, but it may be estimated at 110 miles in length, by seventy the average breadth. The greater part of the province is composed of woods and uncultivated plains; where a number of very fine horses are bred, superior camels, and black cattle. Other parts produce grain and cotton. It is chiefly possessed by various independent chiefs, who are often connected with the pirates of the coast: the inhabitants are principally Mahommedans. The chief towns are Boojebooje, Luckput, Bundar, and Mandavie.

CUTCH GUNDAVA, a district of Baloochistan, in Persia, situated at the bottom of the mountains south-east of Kelat, and about 150 miles in length, by forty-five in breadth. The soil is black and rich, growing every species of grain, together with cotton, madder, and indigo. The rains are in June, July, August, and in the spring months, during the summer, the simoom, or pestilential wind, is frequent and very destructive. The climate is otherwise good, and the soil excellent, producing a large revenue to the khan of Kelat. Great quantities of grain are exported to the sea-ports of Corachie and Sonmeany. To the northward of Cutch Gundava lies Anund Dijil.

CUTCHWARA, a district in the province of Malwah, Hindostan, situated about the twenty-fifth degree of north latitude, and mostly tributary to the Malwah Mahrattas. It is intersected by the Gillysinde river. The chief towns are Dewagur and Soonel.

CUTH, signifies knowledge or skill. So Cuthwin is a knowing conqueror; Cuthred, a knowing counsellor; Cuthbert, famous for skill. Much of the same nature are Sophocles and Sophianus.

CUTH, or CUTHAH, a province of Assyria, on the Araxes, the same with Cush; but others take it to be the country which the Greeks called Susiana, and which to this day, says Dr. Wells, is by the inhabitants called Chusistan. Calmet is of opinion that Cuthah and Scythia are the same place, and that the Cuthites who were removed into Samaria by Salmaneser (2 Kings xvii. 24), came from Cush or Cuth, mentioned in Gen. ii. 13. They worshipped the idol Nergal, id. ibid. 30. He adds that they came from Cush, or Cutha upon the Araxes; and that their first settlement was in the cities of the Medes, subdued by Salmaneser and the kings of Syria, his predecessors. The Scriptures inform us, that the Cuthites, upon their arrival in this new country, continued to worship the gods formerly adored by them beyond the Euphrates. Esarhaddon, king of Assyria, who succeeded Sennacherib, appointed an Israelitish priest to go thither, and instruct them in the religion of the Hebrews. But these people thought they might reconcile their old superstition with the worship of the true God. They therefore framed particular gods for themselves, which they placed in the several cities where they dwelt. But afterwards they gave up idolatry, and adhered solely to the law of Moses. The Samaritans were their descendants.

CUTICLE, *n. s.* } Lat. *cuticula*. The out-
CUTI'CULAR, *adj.* } ward skin of the body; a
CUTA'NEOUS, *adj.* } thin skin formed on the surface of any liquor. Belonging or relating to the skin.

This serous, nutritious mass is more readily circulated into the *cutaneous* or remotest parts of the body. *Floyer on Humours.*

When any saline liquor is evaporated to *cuticle* and let cool, the salt concretes in regular figures, which argues that the particles of the salt, before they concreted, floated in the liquor at equal distances in rank and file. *Newton's Opticks.*

Some sorts of *cutaneous* eruptions are occasioned by feeding much on acid unripe fruits and farinaceous substances. *Arbuthnot.*

In each of the very fingers there are bones and gristles, and ligaments and membranes, and muscles, and tendons, and nerves and arteries, and veins and skin, and *cuticle* and nail. *Bentley's Sermons.*

Where the spontaneous adhesive electric atmospheres are employed to charge plates of air, as in the Galvanic pile, or probably to charge their animal membranes or *cuticles*, as perhaps in the shock given by the torpedo or gymnotus, it seems necessary that the intervening non-conducting plate must be extremely thin. *Darwin.*

Those parts of our system which are in health excited into perpetual action, give us pain when they are not excited into action: thus, when the hands are

for a time immersed in snow, an inaction of the *cutaneous* capillaries is induced, as is seen from the paleness of the skin, which is attended with the pain of coldness. *Id.*

CUTICLE. See ANATOMY.

CUTLASS, *n. s.* Fr. *coutelas*. This word is written sometimes cutlace, sometimes cuttleax; in Shakspeare, curtleax; and in Pope, cutlash. A broad cutting sword: the word is much in use among the seamen.

> Were 't not better
> That I did suit me all points like a man?
> A gallant *curtleax* upon my thigh,
> A boar spear in my hand?
>
> *Shakspeare. As You Like It.*

Mores, in his curious dissertation on letter founders, calls a *cutlass*, as it seems, a *courtlelasse*, among the antique typographic ornaments. *Warton.*

CUTLER (Sir John), bart. and citizen of London, was a great benefactor to the grocers' company, and contributed largely to the rebuilding of the college of physicians in Warwick-lane. After his death, however, in 1699, his executors claimed the sum which he had advanced, with interest, amounting in all to £7000. They finally compromised the claim for £2000. Pope commemorates this circumstance in some well-known verses; describing our baronet as a perfect miser. It appears, however, that he liberally subscribed to many charities, and built at his own charge the north gallery of his parish-church, St. Margaret's, Westminster. He had two daughters, who were respectively married to John, earl of Radnor, and Sir William Portman, bart. His funeral it is said cost the sum of £7666.

CUTLERS, COMPANY OF. This company was incorporated in 1413 by Henry V.; their arms are *gules*, six daggers in three crosses saltire *argent*, handled and hilted *or;* the crest an elephant with a castle.

CUTLERY, in connection with the mechanical arts, will embrace all kinds of edged and sharp tools, of iron or steel, and the modes of their manufacture.

It might be expected, that in no department of the arts of a country, would the progress of civilisation be more distinctly marked, than in the degree of excellence attained in this manufacture. A knife will purchase half the lands of a village from a barbarous tribe; and Great Britain has well sustained her superiority among civilised nations in the general quality of her cutlery goods.

But in other, and far less civilised countries, a superior steel has been manufactured for ages. It is a little remarkable, that none of our modern discoveries in chemistry have enabled us to imitate, successfully, the sword and sabre blades of Damascus; and that, within a very few years, in 1795, we believe, a new kind of foreign steel, the wootz of India, has been introduced into this country, and been found superior to any thing manufactured here for the blades of penknives.

The Damascene blades are supposed, by European cutlers, to be constructed of fine iron and steel-wire welded together in alternate layers; the wave or water being given to them by sulphate of alumina applied to the final surface. Other accounts state them to be hardened by repeated immersions, when red-hot, in goat's blood. But the real process has never been accurately known in this country; and it is not improbable, that the iron ore of Syria may possess some peculiarity which is the foundation of this excellence in its manufactured steel.

Such a conjecture has been offered by Mr. Stodart, with regard to the ores out of which the wootz of India is formed. For the introduction of it into this country, we are indebted to the late distinguished naturalist, Sir Joseph Banks, who first procured a pen-knife to be made from a cake of it, in the year above-mentioned. The forging was attended with some difficulty, owing to the unequal fusion of the metal, some parts being overcharged with the steely principle, and others being as much deficient in it. But the pen-knife made was excellent. The Indian method of making wootz has been described as follows: forged iron, in pieces, is enclosed in a crucible, and heated in a furnace with wood. Two or three pairs of bellows are employed to augment the heat, until the wood is completely charred, and the iron fused and converted into steel. The chief peculiarity of the process seems to be the use of uncharred wood. A variety of cutting instruments have been manufactured from this steel with great success.

Those articles of cutlery which do not require a fine polish, and are of low price, are made from what is called blistered steel, or that which has not undergone fusion. See our article STEEL. Those which require the edge to possess considerable tenacity, but in which superior hardness is not required, are made from sheer steel. The finer kinds of cutlery are made from steel which has been in a state of fusion, and which is termed cast-steel, no other kinds being susceptible of a fine polish. Table-knives are mostly made of sheer-steel, the tang and shoulder being of iron, and the blade being attached, by giving them a welding heat. The knives, after forging, are hardened, by heating them red-hot, and plunging them into water; they are afterwards heated over the fire, till they become blue, and then ground. Forks are made, almost altogether, by the aid of the stamp and appropriate dies. The prongs only are hardened and tempered. Razors are made of cast-steel, the edge of a razor requiring the combined advantages of great hardness and tenacity. After the razor-blade is forged into its proper shape, by the aid of a convex-faced hammer and anvil, it is hardened, by gradually heating it to a bright red heat, and plunging it into cold water. It is tempered by heating it afterwards until a brightened part appears of a straw color. This would be more equally effected by the use of sand, or, what is still better, by hot oil, or a fusible mixture, consisting of eight parts of bismuth, five of lead, and three of tin; a thermometer being placed in the liquid at the time the razors are immersed, for the purpose of indicating the proper temperature, which is about 500° of Fahrenheit. After the razor has been ground into its proper shape, it is finished by polishing.

The glazer, used in polishing, is formed of wood, faced with an alloy of lead and tin; after its face is turned to the proper form and size, it is filled with notches, which are filled up with emery and tallow. This instrument gives the razor a smooth and uniform surface and a fine edge. The polisher consists of a piece of circular wood, running upon an axis, like that of the stone or the glazer. It is coated with leather, having its surface covered with crocus martis. The handles of razors and knives are made of ivory and tortoise-shell, bone, or other materials, directed by fashion, or the use for which they are designed. The horn of razor-handles is commonly cut into pieces, and placed between two dies, having a recess of the shape of the handle. By this process it admits of considerable extension, and is dyed black by means of logwood and green vitriol. The clear horn-handles are sometimes stained, so as to imitate tortoise-shell, by being coated with a composition of three parts of potash, one of minium, ten of quicklime, and as much water as will reduce the whole into a pulpy mass. Those parts of the handle requiring darker shades are more thickly covered, and the stains are dried in before the fire.

The manufacture of pen-knives is divided into three departments; the first is the forging of the blades, the spring, and the iron scales; the second, the grinding and polishing of the blades; and the third, the handling, which consists in fitting up all the parts, and finishing the knife. The blades are made of the best cast-steel, and hardened and tempered to about the same degree with that of razors. In grinding they are made a little more concave on one side than the other, in other respects they are treated in a similar way to razors. The handles are covered with horn, ivory, and sometimes wood; but the most durable are those of stags-horn. The general fault in pen-knives is that of being too soft. The temper ought to be not higher than a straw color, as it seldom happens that a pen-knife is so hard as to snap on the edge.

The beauty and elegance of polished steel is never displayed to more advantage than in the manufacture of the finer kinds of scissars. The steel employed for this purpose should be of the choicest description; it must possess hardness and uniformity of texture for the sake of securing a fine polish, and great tenacity, when hot, for the purpose of forming the bow or ring of the scissar, which requires to be extended from a solid piece, having a hole previously punched through it. It ought also to be very tenacious when cold, to allow that delicacy of form observed in ladies' scissars. After they are forged as near to the same size as the eye of the workman can ascertain, they are paired. The bows and some other parts are filed to their intended form: the blades are also roughly ground, and the two sides properly adjusted to each other, after being bound together with wire, and hardened up to the bows. They are afterwards heated till they become of a purple color, which indicates their proper temper. Almost all the remaining part of the work is performed at the grinding mill, with the stone, the lap, the polisher, and the brush; the last being used to polish those parts which have been filed, and which the lap and the polisher cannot touch. Previous to screwing the scissars finally together, they are rubbed over with the powder of quicklime, and afterwards cleaned with soft sheep leather. The quick-lime absorbs the moisture from the surface. Scissars are ornamented by bluing and gilding; also with studs of gold or polished steel. Very large scissars are manufactured partly of iron and partly of steel; the shanks and bows being of the former. These, as well as those all of steel, which are not hardened all over, cannot be polished: an inferior sort of lustre, however, is given to them by means of a burnish of hardened polished steel, which is very easily distinguished from the real polish, by the irregularity of the surface. Having entered into these particulars, relating to the manufacture of the usual articles found in cutlers' shops, we shall now enter upon some of the more general principles that are applicable to the finer articles of cutlery.

Cutlers do not use any coating to their work at the hardening heat, as the file-cutters do; indeed, it seems evidently unnecessary when the article is intended to be tempered and ground. The best rule is to harden as little as possible above the state intended to be produced by tempering. Work which has been overheated has a crumbly edge, and will not afford the wire hereafter to be described. The proper heat is a cherry-red, visible by day-light. No advantage is obtained from the use of salt in the water, or cooling that fluid, or from using mercury instead of water; but it may be remarked, that questions respecting the fluid are, properly speaking, applicable only to files, gravers, and such tools as are intended to be left at the extreme of hardness.

While Mr. Stodart does not seem to attach much value to peculiarities in the process of hardening, he mentions it as the observation of one of his best workmen, that the charcoal fire should be made up with shavings of leather: and that he never had a razor crack in the hardening since he had used this method. It appears from a consideration of other facts, that this process is likely to prove advantageous. When brittle substances crack in cooling, it arises from the outside contracting and becoming too small to contain the interior parts. But it is known, that hard steel occupies more space than soft, and it may be easily inferred, that the nearer the steel approaches to the state of iron, the less will be this increase of dimensions. If, then, we suppose a razor, or any other piece of steel, to be heated in an open fire with a current of air passing through it, the external part will, by the loss of carbon, become less steely than before; and when the whole piece comes to be hardened, the inside will be too large for the external part, which will probably crack. But if the piece of steel be wrapped up in the cementing mixture, or if the fire itself contain animal coal, and is put together so as to operate in the manner of that mixture, the external surface, instead of being degraded by this heat, will be more carbonated than the internal part, in consequence of which

it will be so far from splitting or bursting during its cooling, that it will be acted upon in a contrary direction, tending to render it more dense and solid.

One of the greatest difficulties in hardening steel-works of any considerable extent, more especially such articles as are formed of thin plates, or have a variety of parts of different sizes, consists in the apparent impracticability of heating the thicker parts before the slighter are burned away; besides which, even for a piece of uniform figure, it is no easy matter to make up a fire which shall give a speedy heat, and be nearly of the same intensity throughout. 'This difficulty,' says Mr. Nicholson, 'formed a very considerable impediment to my success in a course of delicate steel-work, in which I was engaged about seven years ago; but, after various unsuccessful experiments, I succeeded in removing it by the use of a bath of melted lead, which, for very justifiable reasons, has been kept a secret till now. Pure lead, that is to say, lead containing little or no tin, is ignited to a moderate redness, and then well stirred: into this the piece is plunged for a few seconds; that is to say, until when brought near the surface, that part does not appear less luminous than the rest. The piece is then speedily stirred about in the bath, suddenly drawn out, and plunged into a large mass of water. In this manner, a plate of steel may be hardened so as to be perfectly brittle, and yet continue so sound as to ring like a bell; an effect which I never could produce in any other way. Mr. Stodart has lately made trial of this method, and considers it to be a great acquisition to the art, as, in fact, I found it.'

The letting down, or tempering of hard steel, is considered as absolutely necessary for the production of a fine and durable edge. It has been usual to do this by heating the hardened steel till its bright surface exhibits some known color by oxidation. The first is a very faint straw color, becoming deeper and deeper, by increase of heat, to a fine deep golden-yellow, which changes irregularly to a purple, then to an uniform blue, succeeded by white and several successive faint repetitions of these series. It is well known, that the hardest state of tempered instruments, such as razors and surgeons' instruments, is indicated by this straw color; that a deeper color is required for leather-cutters' knives, and other tools, that require the edge to be turned on one side; that the blue, which indicates a good temper for springs, is almost too soft for any cutting instrument, except saws, and such tools as are sharpened with a file, and that the lower states of hardness are not at all adapted to this use. But it is of considerable importance, that the letting down, or tempering, as well as the hardening, should be effected by heat equally applied, and that the temperatures, especially at the lower heats, where greater hardness is to be left, should be more precisely ascertained than can be done by the different shades of oxidation. Mr. Hartley first practised the method of immersing hard steel in heated oil, or the fusible compound of lead five parts, tin three, and bismuth eight. The temperature of either of these fluids may be ascertained in the usual manner, when it does not exceed the point at which mercury boils; and, by this contrivance, the same advantages are obtained in lowering the temperature of a whole instrument, or any number of them at once, as have already been stated in favor of my method of hardening. Oil is preferable to the fusible mixture for several reasons. It is cheaper; it admits of the work being seen during the immersion, by reason of its transparency; and there is no occasion for any contrivance to prevent the work from floating.

Mr. Nicholson requested Mr. Stodart to favor him with an account of the temperatures at which the several colors make their appearance upon hardened steel; in compliance with which he made a series of experiments upon surgeons' needles, hardened, highly polished, and exposed to a gradual heat, while floating at the surface of the fusible mixture. The appearances are as follow: No. 1, taken out at 430° of Fahrenheit. This temperature leaves the steel in the most excellent state for razors and scalpels. The tarnish, or faint yellowish tinge, it produces, is too evanescent to be observed, without comparison with another piece of polished steel. Instruments, in this state, retain their edge much longer than those upon which the actual straw color has been brought, as is the common practice. Mr. S. informs me, says Mr. Nicholson, that 430° is the lowest temperature for letting down, and that the lower degrees will not afford a firm edge. No. 2, at 440°, and 3, at 450°. These needles differ so little in their appearance from No. 1, that it is not easy to arrange them with certainty when misplaced. No. 4 has the evident tinge, which workmen call pale straw color. It was taken out at 460°, and has the usual temper of penknives, razors, and other fine edge-tools. It is much softer than No. 1, as Mr. Stodart assures me, and this difference exhibits a valuable proof of the advantages of this method of tempering. Nos. 2, 6, 7, and 8, exhibit successive deeper shades of color, having been respectively taken out at the temperatures 470°, 480°, 490°, and 500°. The last is of a bright brownish metallic yellow, very slightly inclining to purple. No. 9 obtained an uniform deep blue at the temperature of 580°. The intermediate shades produced on steel, by heats between 500° and 580°, are yellow, brown, red, and purple, which are exhibited irregularly on different parts of the surface. As I had before seen this irregularity, particularly on the surface of a razor of wootz, and had found, in my own experience, that the colors on different kinds of steel do not correspond with like degrees of temper, and probably of temperature in their production, I was desirous that some experiments might be made upon it by the same skilful artist. Four beautifully polished blades were, therefore, exposed to heat on the fusible metal. The first was taken up when it had acquired the fine yellow, or uniform deep straw color. The second remained on the mixture, till the part nearest the stem had become purplish; at which period, a number of small round spots, of a purplish color, appeared in the clear yellow of the blade. The third was left till the thicker parts of the blade were of a deep

ruddy purple; but the concave face still continued yellow. This also acquired spots like the other, and a slight cloudiness. These three blades were of cast-steel; the fourth, which was made out of a piece called Styrian steel, was left upon the mixture till the red tinge had pervaded almost the whole of its concave face. Two or three spots appeared upon this blade; but the greater part of its surface was variegated with blue clouds, disposed in such a manner, as to produce those waving lines which, in Damascus steel, are called 'the water.' Two results are more immediately suggested by these facts: first, that the irregular production of a deep color upon the surface of brightened steel, may serve to indicate the want of uniformity in its composition; and, secondly, that the deep color, being observed to come on first at the thickest parts, Mr. Stodart was disposed to think, that its more speedy appearance was owing to those parts not having been hardened.

An ingenious method of hardening delicate steel-work was some time since communicated to Mr. Stodart by Dr. Wollaston. The steel enclosed in a tube is surrounded by the fusible alloy of eight parts lead, two tin, and five bismuth. The tube, with its contents, is then heated in a furnace to rednesss, and plunged into a cooling fluid. It is afterwards thrown into boiling water, by which the alloy is fused, and the steel is left perfectly hardened and unaltered by twisting or cracking.

Suppose our cutting instrument to be forged, hardened, and let down or tempered; it remains to be ground, polished, and set. The grinding of fine cutlery is performed upon a grind-stone of a fine close grit, called a Bilston grind-stone, and sold at the tool shops in London at a moderate price. The cutlers use water, and do not seem generally to know any thing of the use of tallow. The face of the work is rendered finer by subsequent grinding upon mahogany cylinders, with emery of different fineness, or upon cylinders faced with hard pewter, called laps, which are preferable to those with a wooden face. The last polish is given upon a cylinder faced with buff leather, to which crocus, or the red oxide of iron, is applied with water. This last operation is attended with considerable danger of heating the work, and almost instantly reducing its temper along the thin edge, which at the same time acquires the colors of oxidation.

The setting now remains to be performed, which is a work of much delicacy and skill: so much so, indeed, that Mr. Stodart says, he cannot produce the most exquisite and perfect edge if interrupted by conversation, or even by noises in the street. The tool is first whetted upon a hone with oil, by rubbing it backwards and forwards. In all the processes of grinding or wearing down the edge, but more especially in the setting, the artist appears to prefer that stroke which leads the edge according to the action of cutting, instead of making the back run first along the stone: for if there be any lump or particle of stone or other substance lying upon the face of the grinder, and the back of the tool be first run over it, it will proceed beneath the edge and lift it up, at the same time producing a notch. But on the other hand, if the edge be made to move foremost and meet such particle, it will slide beneath it, and suffer no injury. Another precaution in whetting is, that the hand should not bear heavy; because it is evident, that the same stone must produce a more uniform edge if the steel be worn away by many, than by few strokes. It is also of essential importance that the hone itself should be of a fine texture, or that its silicious particles should be very minute.

The grind-stone leaves a ragged edge, which it is the first effect of whetting to reduce so thin that it may be bent backwards and forwards. This flexible part is called the wire, and if the whetting were to be continued too long it would break off in pieces without regularity, leaving a finer though still very imperfect edge, and tending to produce accident while lying on the face of the stone. The wire is taken off by raising the face of the knife to an angle of about fifty degrees with the surface of the stone, and giving a light stroke edge foremost, alternately towards each end of the stone. These strokes produce an edge, the faces of which are inclined to each other in an angle of about 100 degrees, and to which the wire is so slightly adherent that it may often be taken away entire, and is easily removed by lightly drawing the edge along the finger nail. The edge thus cleared, is generally very even: but it is too thick, and must again be reduced by whetting. A finer wire is by this means produced, which will require to be again taken off, if, for want of judgment or delicacy of hand, the artist should have carried it too far But we will suppose the obtuse edge to be very even, and the second wire to be scarcely perceptible. In this case the last edge will be very acute, but neither so even nor so strong as to be durably useful. The finish is given by two or more alternate light strokes with the edge slanting foremost, and the blade of the knife raised, so that its plane forms an angle of about twenty-eight degrees with the face of the stone. This is the angle which by careful observation and measurement Mr. Stodart habitually uses for the finest surgeons' instruments, and which he considers as the best for razors, and other keen cutting tools. The angle of edge is therefore about fifty-six degrees. The excellence and uniformity of a fine edge may be ascertained, by its mode of operation when lightly drawn along the surface of the skin, or leather, or any organised soft substance. Lancets are tried by suffering the point to drop gently through a piece of thin soft leather. If the edge be exquisite, it will not only pass with facility, but there will not be the least noise produced, any more than if it had dropped into water. This kind of edge cannot be produced, but by performing the last two or more strokes on the green hone. The operation of strapping is similar to that of grinding or whetting, and is performed by means of the angular particle of fine crocus, or other material bedded in the face of the strap. It requires less skill than the operation of setting, and is very apt, from the elasticity of the strap, to enlarge the angle of the edge or round it too much. The chief manufactories of cutlery in

England, are at Sheffield and in London. At the former by the local advantages of coal, &c. on the spot, and the greater division of labor, cutlery in general is afforded at much lower prices than in the metropolis, where the finer descriptions of this important manufacture are more attended to, and surgical instruments, in particular, are made with the greatest skill.

CUTLET, *n. s.* Fr. *cotelette*. A steak; strictly, it means a rib.

So mutton *cutlets*, prime of meat. *Swift.*

CUTTACK, a considerable district of Orissa, Hindostan, situated between the twentieth and twenty-second degrees of north latitude. It is bounded on the north by Midnapoor and Mohurbunge; on the south by the Circars; on the east by the Bay of Bengal; and on the west by several small states of the interior. Its length is about 150 miles, and breadth about sixty, containing a population of 1,200,000 souls. Between Gaintee and Bamori the country is richly productive, and is inhabited by weavers, who manufacture muslins in pieces for turbans. From Arickpoor to Cuttack the land is chiefly arable, but interspersed with bushes, and not thoroughly cultivated. The Mahanuddy River, in passing through this country, often changes its name, according to the vicinity of different towns and villages. It is also watered by other considerable streams. The rents are chiefly paid in cowries.

The holy land of Juggernauth extends about fifteen miles on each side of the temple of Juggernauth, to the north and south. Its occupants have from time immemorial been exempt from the taxes which Hindoos pay for access to the temple, except during the ruth and dole jattries, when they also are liable to a small impost.

The chief towns are Cuttack, Juggernauth, Buddruck, and Balasore. This district is mentioned by the Mahommedan historians as early as the year 1212, under the title of Jagepore, or Jehazpore. It was then subject to a Hindoo prince, who resided at Jagepore; it was subdued by and annexed to Bengal in the reign of Soyman Kerang, 1569. Thus it remained till the year 1751, when it was ceded by the nuwab Alyverdy Khan to the Nagpore Mahrattas, who, in 1803, were again compelled to resign it to the victorious arms of the British, and it is now managed by a civil establishment of judge, collector, &c.

CUTTACK, the capital of the above district, called also Cuttack Benares, formerly Saringgur, was once fortified, and a highly respectable town; but, during the period it was governed by the Mahrattas, it fell to decay. In the year 1592 it withstood the Mogul arms for nearly a month, and is naturally strong, but the climate is unhealthy. It is at present the residence of the gentlemen of the civil establishment, and has a cantonment for a corps of native infantry.

CUTTER, a small vessel, commonly navigated in the channel of England. It is furnished with one mast, and rigged as a sloop. Many of these vessels are used in an illicit trade, and others are employed by government to take them; the latter of which are either under the direction of the admiralty, or custom-house.

CUTTLE. Ang.-Sax. cutele. A fish, which, when pursued, darkens the water with an inky substance; a foul-mouthed fellow; a knife.

Away, you cutpurse rascal; you filthy bung, away: by this wine, I'll thrust my knife in your mouldy chaps, if you play the saucy *cuttle* with me.

Shakspeare. Henry IV.

It is somewhat strange, that the blood of all birds and beasts, and fishes, should be of a red colour, and only the blood of the *cuttle* should be as black as ink.

Bacon.

He that uses many words for the explaining any subject, doth, like the *cuttle* fish, hide himself for the most part in his own ink. *Ray on the Creation.*

CUTTLE-FISH. See SEPIA.

CUTTS (John lord), was son of Richard Cutts, esq. of Matching in Essex; where the family were settled about the time of Henry VI., and had a large estate. He entered early into the service of the duke of Monmouth, was aide-de-camp to the duke of Lorraine in Hungary, and signalised himself in a very extraordinary manner at the taking of Buda by the imperialists in 1686; which important place had been for near a century and a half in the hands of the Turks. Returning to England at the Revolution, he obtained a regiment of foot; was created baron Gowran in Ireland, December 6th, 1690; appointed governor of the Isle of Wight, April 14th, 1693; was made a major-general; and, when the assassination project was discovered, 1695-6, was captain of the king's guard. He was colonel of the Coldstream guards in 1701; when Mr. Steele, who was indebted to his interest for a military commission, inscribed to him his first work, The Christian Hero. On the accession of queen Anne, he was made a lieutenant-general of the forces in Holland; commander in chief of the forces in Ireland, under the duke of Ormond, March 23d, 1704-5; and afterwards one of the lords justices of that kingdom. He died at Dublin January 26th, 1706-7, and was buried there in the cathedral of Christ Church. He wrote a poem on the death of queen Mary, and published, in 1687, Poetical Exercises, written upon several occasions, and dedicated to her royal highness Mary, princess of Orange. One of his songs is quoted by Steele in his Tatler; but his Muse Cavalier is erroneously ascribed by Walpole to lord Peterborough.

CUT-WATER, the sharp part of the head of a ship below the beak, so called because it cuts or divides the water before it comes to the bow, that it may not come too suddenly to the breadth of the ship, which would retard it.

CUT-WORK, *n. s.* Embroidered work.

CUXHAVEN, a sea-port of Germany, in the duchy of Bremen, situated on the left bank of the Elbe, at its embouchure. The harbour, being very large and commodious, is much frequented, and vessels generally take in pilots here, in order to ascend the river to Hamburgh. A yacht is stationed out at sea, near the outermost buoy, with pilots ready to conduct any vessel that may demand them. The town and bailiwic belong to the corporation of Hamburgh, who have held them ever since the fourteenth century. During the late revolutionary wars Cuxhaven became a place of great importance as an entrepôt of

British goods. On the fall of Hamburgh in 1806, it came into the possession of the French, and remained under their domination above seven years. When, at the close of the war, the French defended Hamburgh, Cuxhaven was the scene of some severe fighting. It is sixty miles north-west of Hamburgh, and the light-house is in long. 8° 43′ 1″ E., lat. 53° 52′ 21″ N.

CUYO, or Cujo, an extensive province of Peru, and a portion of the former vice-royalty of Buenos Ayres, is bounded on the north by Tucuman, on the east by the Pampas deserts, on the south by deserts, and on the west by the Andes. It is mild in climate, and very fertile in grain of all kinds, and pasturage: much wine and brandy are made, and immense herds of cattle range the valleys.

CYATHUS, κυαθος, from χυειν, to pour out, was a common measure among the Greeks and Romans, both of the liquid and dry kind. It was equal to an ounce, or the twelfth part of a pint, and was made with a handle like our punch-ladle. The Romans frequently drank as many cyathi as there were muses, i. e. nine; or as many as there were letters in their patron's name. The cyathus of the Greeks is said by Galen and others to have weighed ten drachms; elsewhere he says, that a cyathus contains twelve drachms of oil, thirteen drachms and one scruple of wine, water, or vinegar, and eighteen drachms of honey. Among the Veterinarii, the cyathus contained two ounces.

CYAXARES I., son of Phraortes, king of Media and Persia. He bravely defended his kingdom against the Scythians; made war against Alyattes, king of Lydia; and subjected to his power all Asia, beyond the river Halys He died after a reign of forty years, in the year of Rome 160.

Cyaxares II. is supposed by Dr. Prideaux and others to be the same as Darius the Mede, the son of Astyages, king of Media. He added seven provinces to his father's dominions, and made war against the Assyrians, whom Cyrus favored.

CYBELE, in Pagan mythology, the daughter of Cœlius and Terra, wife of Saturn, and mother of Jupiter, Neptune, Pluto, &c. She is also colled Rhea, Ops, Vesta, Bona Mater, Magna Mater, Berecynthia, Dindymene, &c., and by some is reckoned the same with Ceres: but most mythologists make these two distinct goddesses. According to Diodorus, she was the daughter of a Lydian prince, and, as soon as she was born, she was exposed on a mountain. She was preserved by sucking some of the wild beasts of the forest, and received the name of Cybele from the mountain where her life had been preserved. When she returned to her father's court, she had an intrigue with Atys, a beautiful youth, whom her father mutilated, &c. Most of the mythologists mention the amours of Atys and Cybele. In Phrygia the festivals of Cybele were observed with the greatest solemnity. Her priests, called Corybantes, Curetes, Galli, &c., it is said were not admitted to the service of the goddess without a previous mutilation. In the celebration of the festivals, they imitated the manners of madmen, and filled the air with shrieks and howlings, mixed with the confused noise of drums, tabrets, bucklers, and spears. This was in commemoration of the sorrow of Cybele for the loss of her favorite Atys. The goddess was generally represented as a robust woman, far advanced in pregnancy, to imitate the fecundity of the earth. She held keys in her hand, and her head was crowned with rising turrets, or with leaves of oak. She sometimes appears riding in a chariot, drawn by two tame lions: Atys follows by her side, carrying a ball in his hand, and supporting himself upon a fir-tree, which is sacred to the goddess. She is also represented with a sceptre in her hand, and with many breasts, to show that the earth gives aliments to all living creatures; and she generally carries two lions under her arms. From Phrygia the worship of Cybele passed into Greece, and was solemnly established at Eleusis under the name of the Eleusinian mysteries of Ceres. The Romans, by order of the Sibylline books, brought the statue of the goddess from Pessinus into Italy; and when the ship which carried it had run on a shallow bank of the Tiber, the virtue of Claudia was said to have been vindicated, by removing it with her girdle. It is supposed that the mysteries of Cybele were first known about 257 years before the Trojan war, or 1580 years before the Augustan age. The Romans were particularly superstitious in washing, every year on the 6th of the kalends of April, the shrine of this goddess in the waters of the river Almon. Many obscenities prevailed in the observation of the festivals; and the priests themselves were the most eager to use indecent expressions, and to show their unbounded licentiousness.

CYBELICUM Marmor, a name given by the ancients to a species of marble dug in the mountain Cybele. It was of an extremely bright white, with broad veins of bluish-black.

CYCAS, in botany, a genus of plants of the monœcia class, and polygamia order. The fruit is a dry plum, with a bivalved kernel. There is but one species described by Linnæus, viz. the circinalis; but professor Thunberg mentions another, viz. 1. C. caffra, broad broom, or bread tree of the Hottentots. This plant, discovered by professor Thunberg, is described in the Nova Acta Reg. Soc. Scient. Ups. vol. ii. p. 283, tab. V. The pith, or medulla, which abounds in the trunk of this little palm, Mr. Sparrman informs us, is collected and tied up in dressed calf or sheep skins, and then buried in the earth for the space of several weeks, till it becomes sufficiently mellow and tender to be kneaded up with water into a paste, of which they afterwards make small loaves or cakes, and bake them under the ashes. 2. C. circinalis, or sago-tree, which grows spontaneously in the East Indies, and particularly on the coast of Malabar. It runs up with a straight trunk to upwards of forty feet in height, having many circles the whole length, occasioned by the old leaves falling off; for standing in a circular order round the stem, and embracing it with their base, whenever they drop, they leave the marks of their adhesion. The leaves are pinnated, and grow to the length of seven or eight feet. The pinnæ or lobes are long, narrow, entire, of a shining green, all the way of a

breadth, lance-shaped at the point, closely crowded together, and stand at right angles on each side the mid-rib, like the teeth of a comb. The flowers are produced in long bunches at the foot-stalks of the leaves, and are succeeded by oval fruit, about the size of large plums, of a red color when ripe, and a sweet flavor. Each contains a hard brown nut, enclosing a white meat which tastes like a chestnut. This is a valuable tree to the inhabitants of India, as it not only furnishes a considerable part of their constant bread, but also supplies them with a large article of trade. See SAGO.

CYCEON, from κυκαειν, to mix, a name given by the ancient poets and physicians to a mixture of meal and water, and sometimes of other ingredients. These constituted the two kinds of cyceon; the coarser being of the water and meal alone; the richer and more delicate composed of wine, honey, flour, water, and cheese. Homer, in the 11th Iliad, speaks of cyceon made with cheese, and the meal of barley mixed with wine, but without any mention either of honey or water; and Ovid, describing the draught of cyceon given by the old woman of Athens to Ceres, mentions only flour and water. Dioscorides understood the word in both these senses; but extolled it most in the coarse and simple kind: he says, when prepared with water alone, it refrigerates and nourishes greatly.

CYCINNIS, a Grecian dance, so called from its supposed inventor, one of the satyrs belonging to Bacchus. It consisted of a combination of grave and gay movements.

CYCLADES, in ancient geography, islands so called, as Pliny informs us, from the Cyclus or orb in which they lie; beginning from the promontory Geraestum of Eubœa, and lying round the island Delos. Their situation and number is not so generally agreed upon. Strabo says, they were first reckoned twelve, but that many others were added: yet most of them lie to the south of Delos, and but few to the north, so that the middle or centre, ascribed to Delos, is to be taken in a loose, not in a geometrical sense. Strabo recites them, after Artemidorus, as follows: Helena, Ceos, Cynthus, Seriphus, Melos, Siphnus, Cimolus, Prepesinthus, Olearus, Naxos, Paros, Syrus, Myconos, Tenos, Andros, Gyarus; but he excludes from the number, Prepesinthus, Olearus, and Gyarus.

CYCLADES, GREAT. See HEBRIDES, NEW.

CYCLAMEN, sowbread, a genus of the monogynia order, and pentandria class of plants: natural order twenty-first, preciæ. COR. verticillated, with the tube very short, and the throat prominent: the BERRY is covered with the capsule. There are but two species, which, however, produce many beautiful varieties. They are low, herbaceous, flowery perennials, of the tuberous rooted kind, with numerous, angular, heart-shaped, spotted, marbled leaves; and many fleshy foot-stalks six inches high, carrying monopetalous, five-parted, reflexed flowers, of various colors.

CYCLE, *n. s.* } Lat. *cyclus*; κυκλος.
CYCLO'METRY, *n. s.* } A circle; a round of time; a space in which the same revolutions begin again; a method, or account of a method till the same course begins again; imaginary orbs; a circle in the heavens. Cyclometry is the art of measuring cycles.

How build, unbuild, contrive
To save appearances; how gird the sphere
With eentrick, and excentrick, scribbled o'er
Cycle and epicycle, orb in orb! *Milton.*

We do more commonly use these words, so as to style a lesser space a *cycle*, and a greater by the name of period; and you may not improperly call the beginning of a large period the epocha thereof.
Holder on Time.

We thought we should not attempt an unacceptable work, if here we endeavoured to present our gardeners with a complete *cycle* of what is requisite to be done throughout every month of the year.
Evelyn's Kalendar.

Chained to one centre whirled the kindred spheres,
And marked with lunar *cycles* solar years. *Darwin.*

I must tell you that Sir H. Savile had confuted Joseph Scaliger's *cyclometry*. *Wallis.*

CYCLE OF EASTER. See CHRONOLOGY.

CYCLE OF THE MOON. See CHRONOLOGY. It is called also the golden number, and the Metonic cycle, from its inventor Meton the Athenian. At the time of the council of Nice, when the method of finding the time for observing the feast of Easter was established, the numbers of the lunar cycle were inserted in the kalendar, which, upon the account of their use, were set in golden letters, and the year of the cycle called the golden number of that year.

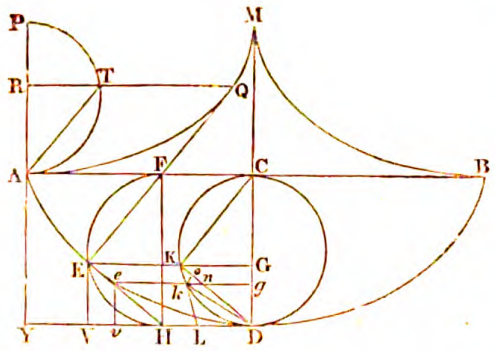
CYCLE OF THE SUN. See CHRONOLOGY.

CYCLISUS, in surgery, an instrument in the form of a half moon, used in scraping the scull, in cases of fractures of that part.

CY'CLOID, *n. s.* } Κυκλοειδης. A geome-
CYCLO'IDAL, *adj.* } trical curve, of which the genesis may be conceived by imagining a nail in the circumference of a wheel: the line which the nail describes in the air, while the wheel revolves in a right line, is the cycloid. Relating to a cycloid; as the cycloidal space is the space contained between the cycloid and its substance.

A man may frame to himself the notion of a parabola, or a *cycloid*, from the mathematical definition of those figures. *Reid.*

CYCLOID, or TROCHOID, a mechanical or transcendental curve, which is thus generated:—Suppose a circle F E H to roll along the straight line A B, so that all the parts of its circumference be applied to the straight line in succession; the point E, that was in contact with A B at A, will, by a motion thus compounded of a circular and rectilineal motion, describe a certain curve line A, to E D B, which is called a cycloid. The straight line A B is called the base, and the line C D perpendicular to A B, bisecting it at C, and meeting the curve in D, is called the axis of the cycloid. The circle by whose revolution the curve is described is called the generating circle. The following are some of the most remarkable properties of this curve.—1. The base A B is equal to the circumference of the generating circle. 2. The axis C D is equal to the diameter of the generating circle. These two properties are obvious from the definition of the curve. 3. Let the generating circle C K D be described on the axis C D as a diameter, and let G K E be perpendicular to the axis, meeting the circle in K,



and the cycloid in E. The straight line E G is equal to the sum of the circular arc D K, and its sine K G. Let the generating circle F E H pass through E and touch the base A B at F; join E F and K C, and draw the diameter F H. The chords F E and C K are evidently equal and parallel, therefore F C=E K; now A C=semi-circumference F E H, and A F=arc F E which has quitted it, therefore F C=arc E H, or E K= arc D K, and E G=arc D K+sine K G. 4. If E H be drawn touching the cycloid at E, it is parallel to K D the chord of the generating circle. Draw *e k g* parallel and indefinitely near to E K G, meeting the chord K D in *n*. Draw K L, D L, touching the generating circle. The triangles K L D, K *k n* are similar, and K L=L D, therefore K *k*=*k n*; now arc D K=E K, and arc D *k*=*e k*, therefore K *k*, or *k n*=E K—*e k*, and, adding *e k* to each of these equals, E K=*e n*, therefore the indefinitely small part of the cycloidal arc E *e*, which coincides with the tangent, is parallel to K *n*, therefore the tangent E H is parallel to the chord K D. 5. The arc D E of the cycloid is equal to twice the chord D K of the generating circle. Join D *k* and draw *k o* perpendicular to K *n*, then K *o* is the indefinitely small increment of the chord *k* D, and K *k* has been proved equal to *k n* (4), therefore K *n* is bisected in *o*; but K *n*=E *e* (4) therefore E *e* the increment of the cycloidal arc D *e* is always double K *o* the corresponding increment of the chord D *k*, therefore the whole arc D E must be double the chord D K. *Corollary.* The whole cycloid A D B is equal to four times the axis C D, or four times the diameter of the generating circle. 6. If C D is produced to M, so that C M=C D, and if the half of the cycloid B D be placed in the position A M, and the other half A D in the position M B, then, if a thread M Q E=M Q A be unfolded from the arc M A, the extremity E of this thread will describe the cycloid A D B. Make A P equal and parallel to C M, and on A P describe the semicircle A T P. Let the thread touch the curve at Q; draw Q R perpendicular to A P, cutting the circle in T, and join A T. Then F Q is parallel to A T (4) and therefore equal to it; now E Q is equal to the arc A Q which is double A T (5) or F Q, therefore E F=F Q=A T, if therefore E K G be drawn perpendicular to C D, C G is equal to A R, and arc C K=arc A T, also the chord K C is equal and parallel to the chord A T, which is parallel to E F, therefore F C=E K; now A F or T Q= arc A T (3). Therefore F C or E K=arc T P= arc D K: therefore E is a point in the cycloid A B D. 7. Let D V be drawn parallel to A C, and E V perpendicular to D V, the area contained by the straight lines E V, V D, and E D, the arc of the cycloid, is equal to the area contained by the circular arc D K, and the straight lines D G, G K. Draw *e v* parallel to E V, and let *g e* meet E V in *x*.

by similar triangles (4) E *x* : *x e* :: D G : G K,
that is G *g* : V *v* :: E V : G K,

therefore the rectangle G K G *g*=rectangle E V·V *v*, that is, the contemporaneous increments of the circular area D *k g* and cycloidal area D *v e* are equal, therefore the circular area D K G is equal to the cycloidal area D V E. *Cor.* The area contained by the base A B and the arc of the cycloid A D B is equal to three times the area of the generating circle. For complete the rectangle D C A Y, and the space D E A Y is equal to the semicircle D K C, therefore the rectangle D Y A C is equal to the cycloidal area D E A C together with the semicircle D K C; but the rectangle D Y A C is contained by D C the diameter of the circle and A C which is half its circumference, it is therefore four times the area of the semicircle, therefore three times the area of the semicircle is equal to the cycloidal area D E A C. See farther relating to the cycloid under MECHANICS.

CYCLOPÆ'DIA, or CYCLOPE'DE, *n. s.* } Κυκλος, a circle, and παιδεια. A circle of knowledge; a course of the sciences.

The tedious and unedifying commentaries on Peter Lombard's scholastic *cyclopede* of divinity. *Warton.*

CYCLOPÆDIA, or ENCYCLOPÆDIA, a term which, in modern times, has been appropriated, from the Greek, to express those useful and superior Dictionaries of Science and Literature, of which we hope to furnish a favorable specimen. Under the term ENCYCLOPÆDIA, which is the more common, we shall give some account of the principal works of this kind which have appeared in our language.

CYCLOPE'AN, *adj.* } From the Cyclops.
CYCLO'PICK, *adj.* } Vast; inspiring terror; furious; savage.

The *cyclopean* furnace of all wicked fashions, the heart. *Bishop Hall.*

Cyclopick monsters, who daily seem to fight against heaven. *Bishop Taylor.*

CYCLOPS, in fabulous history, the sons of Neptune and Amphitrite: the principal of whom were Polyphemus, Brontes, Steropes, and Pyracmon; but their whole number amounted to above 100. Jupiter threw them into Tartarus as soon as they were born; but they were delivered at the intercession of Tellus, and became the assistants of Vulcan. They were of prodigious stature, and had each only one eye, which was placed in the middle of the forehead. Some mythologists say, that the cyclops signify the vapors raised in the air, which occasion thunder and lightning; on which account they are represented as forging the thunderbolts of Jupiter. Others represent them as the first inhabitants of Sicily, who were cruel, of a gigantic form, and dwelt round mount Ætna.

CYCLOPTERUS, the sucker, in ichthyology, a genus belonging to the order of amphibia nantes. The head is obtuse, and furnished with saw teeth: there are four rays in the gills, and the belly fins are connected together in an orbicular form. There are ten species. The chief are:—1. C. liparis, or the sea snail, so called from the soft and unctuous texture of its body, resembling that of the land snail. It is almost transparent, and soon dissolves and melts away. It is found in the sea near the mouths of great rivers, and has been seen full of spawn in January. The length is five inches; the color a pale brown, sometimes finely streaked with a darker. Beneath the throat is a round depression of a whitish color like the impression of a seal, surrounded by twelve small pale yellow tubera, by which probably it adheres to the stones like the other species. 2. C. lumpus, the lump fish, cock paddle, or sea owl, grows to the length of nineteen inches, and weighs seven pounds. The shape of the body is like that of the bream, deep and very thick, and it swims edgeways. The back is sharp and elevated: the belly flat, of a bright crimson color. Along the body there run several rows of sharp bony tubercles, and the whole skin is covered with small ones. The pectoral fins are large and broad, almost uniting at their base. Beneath these is the part by which it adheres to the rocks, &c. It consists of an oval aperture, surrounded with a fleshy, muscular, and obtuse soft substance, edged with many small threaded appendages, which concur as so many claspers. The tail and vent fins are purple. This fish is sometimes eaten in England, being stewed like carp: but is both flabby and insipid.

CY'DER, *n. s.* A fermented drink, made of the juice of apples. See CIDER.

A tendency to these diseases is certainly hereditary, though perhaps not the diseases themselves; thus a less quantity of ale, *cyder*, wine, or spirit, will induce the gout and dropsy in those constitutions whose parents have been intemperate in the use of those liquors. *Darwin.*

CYDER, in rural economy, is particularly used for the liquor expressed and prepared by fermentation from the juice of apples. It has been made in this country from a very early period. Henry of Huntingdon, in describing a quarrel that arose at the court of Edward the Confessor, between the two sons of earl Godwin, represents one of them as departing in a rage to Hereford, (still famous for this beverage) where his brother had ordered a royal banquet to be prepared. 'There he seized his brother's attendants, and cutting off their heads and limbs, he placed them in the vessels of wine, mead, ale, pigment, morat, and cyder.' Henry Hunt., vol. vi. p. 367. But the art of preparing it has never been investigated with much attention, nor improved by science: it is principally, to this day, in the hands of the growers of the fruit. We shall present the reader with the best practical directions that have been given to the public on the subject, viz. by Messrs. Marshall, Crocker, and Knight.

The first of these gentlemen made a tour through the cyder counties with a view to observe the different methods of preparing it. This may be divided into three processes:—I. Preparing the fruit. II. Grinding and expressing the juice from it. III. Fermenting and bottling.

I. *In preparing the fruit*, care must be taken both as to its peculiar quality, and its stage of ripeness, or the season at which it is gathered. Few apples are ready for gathering before Michaelmas; though they are sometimes manufactured before that time. For sale-cyder, and keeping-drink, they are allowed to remain on the trees till fully ripe; and in general the middle of October is considered a proper time for gathering the stire apples. The ripeness of the fruit is judged of by its falling from the tree; and Mr. Marshall, as well as Mr. Crocker, thinks that the forcing it away before that time robs it of some of its most valuable properties. 'The harvesting of fruit,' says the former, 'is widely different in this respect from the harvesting of grain, which has the entire plant to feed it after the separation from the soil; while fruit, after it is severed from the tree, is cut off from all possibility of a further supply of nourishment, and, although it may have reached its wonted size, some of its more essential particles are undoubtedly left behind in the tree. Fruits which are late in ripening, however, will sometimes hang on the tree until spoiled by frost, and particularly the weak watery fruits. The general practice of beating them down with poles is much disapproved of by Mr. Marshall, because the fruit must thus be unequally ripe, the apples on the same tree not ripening all at the same time; and thus part of the richness and flavor of the fruit is entirely lost: besides, if the fermentation is interrupted or rendered complex by a mixture of ripe and unripe fruits, and the liquor is not, at first, sufficiently purged from its feculencies, it will be difficult to clear it afterwards. To avoid these inconveniences, arising from the unequal ripening of the fruit, the trees ought to be gone over first with a hook when the fruit begins to fall naturally, and the trees may be afterwards cleared with the poles when it is all sufficiently ripened, or when the winter is likely to set in. Mr. Marshall observes, that the due degree of maturation of fruit for liquor is a subject about which men differ much in their ideas. The prevailing practice of gathering it into heaps until the ripest begin to rot, is wasting the best of the fruit, and is by no means an accurate criterion. Some shake the fruit, and judge by the rattling of the kernels; others cut through the middle, and judge by their blackness: but none of these appear to be a proper test. It is not the state of the kernels, but of the flesh; not of a few individuals, but of the greater part of the prime fruit, which renders the collective body fit or unfit to be sent to the mill. The most rational test of the ripeness of the fruit is, that of the flesh having acquired such a degree of mellowness, and its texture such a degree of tenderness, as to yield to moderate pressure; thus, when the knuckle or the end of the thumb can with moderate exertion be forced into the pulp of the fruit, it is deemed in a fit state for grinding.

Mr. Marshall is of opinion that one of the grand secrets of cyder-making is the skilful sepa-

ration of the ripe and unripe fruit, were separating it in the mill, and in various localities they may be distinguished. The most effectual method of distinguishing them is by the hand. He also seems to think that the practice of mixing fruits for liquor is improper, because the finer liquors are made from select fruits. And it seems that it might be better if the liquors after they are made, than to put together the whole fruit.

[illegible] methods adopted there distinguishing the fruit, and assorting each by itself. The apple will often be found from the tree, and the latter gathering and windfalls make a fair common article. According to Mr. Knight, the worst fruit will always defend itself in the proper station, in point of the proper separation of the fruits. Those whose fruits are ripe are mixed with green fruit, which will not ripen with them, as that will when separated in the best states of fermentation, should be carefully sent to the mill as they grow, and not mixed with it. The latter sorts, which should remain in the trees till the weight of the fruit would shake, are we have noticed, the proper if making fine cyder. Each sort should be cyder separately, as noticed above, and as fruit is gathered carefully selected. For this purpose, in the common practice of the country, they are placed in heaps of ten inches or a foot thick and exposed to the sun and air, and turned over frequently, which answers in very several fruits. The [illegible] of the fruit, the object [illegible] I would [illegible] the fruit [illegible] in the operation and be affected in what it [illegible] the cyder [illegible] the [illegible] [illegible] [illegible]

ture fermentation; and he must not delay turning it over, thereby to expose the middle of the mass to the influence of the atmosphere.

In order to press the fruit, or pommage as it is now called, it is folded up in pieces of hair-cloth, or placed between layers of clean, sweet straw or reed, and piled up in a square frame or mould: the press is then pulled down and squeezes out the juice, forming the matter into thin and almost dry cakes. Care ought to be taken to keep the straw, reed, or hair-cloths sweet, or the ill effects of their acidity will be communicated to the cyder. The first runnings come off foul and muddy, but the last, particularly in perry, will be as clear and fine as if filtered through paper. The refuse is generally thrown away as useless, or, when dry, used as fuel; if it has not been thoroughly squeezed, the pigs will sometimes eat it; and some people grind it a second time with water, and press it for an inferior liquor for family use. As long as a drop can be drawn, Mr. Marshall recommends to continue the pressure. Even breaking the cakes of the refuse with the hands only, he says, gives the press fresh power over it: regrinding them has a still greater effect: in this state of the materials, the mill gains a degree of power over the more rigid parts of the fruit, which in the first grinding it could not reach. The most eligible management in this stage of the process appears to be this: grind one pressful a-day; press, and regrind the residuum in the evening; infuse the reduced matter all night among part of the first runnings, and in the morning repress while the next pressful is grinding.

III. *Of fermentation and bottling.*—In the fermentation of the liquor, the common practice is to have it put into casks or hogsheads, immediately from the press, and to fill them quite full; when the casks are put into airy sheds, where the warmth differs little from the open atmosphere. They are sometimes even exposed to the open air without any covering but a piece of tile or flat stone, propped up over the bung-hole to carry off the rain. It would seem, from Mr. Marshall's account, that the time with cyder, when the fermentation begins, is quite uncertain, in general varying from one day to a month after it is tunned; though liquor taken immediately from the press, if much agitated, will sometimes pass directly into a state of fermentation. If the commencement of the fermentation is uncertain, its continuance is no less so; liquors that have been agitated will frequently go through it in one day; but otherwise, when allowed to rest, it will take from two to six days. The appearance of the liquor also varies according to the ripeness of the fruit: if the fruit has been properly matured, a thick scum is generally thrown up, resembling that of malt liquor. After the liquor has remained some time in the fermenting vessels it is racked off from the lees, and put into fresh casks. But as a fresh fermentation frequently takes place after racking, when this becomes violent, the liquor must be racked again; and sometimes, before the fermentation is checked, the racking must be repeated five or six times; but when there is only a small degree of fermentation, called fretting, the liquor is suffered to remain in the same cask; this degree, however, is also very undetermined. The best informed cyder-makers are said to repeat the rackings until the liquor appears quiet or nearly so; and when this cannot be accomplished by the ordinary methods of fermentation, they have recourse to fumigating the casks with sulphur, which is called stooming or stumming. For this purpose a match made of thick linen cloth, about ten inches long and an inch broad, well coated with brimstone for about three-fourths of its length, is lighted and hung in at the bung-hole of the cask (which has been previously well seasoned, and every other vent stopped), and, while the match burns briskly, the bung is driven in, keeping the uncoated end of the match by its side. The match thus suspended, burns as long as the air contained in the cask will supply the fire; and when it dies the bung is taken out with the remnant of the match, after which the cask is allowed to remain two or three hours, more or less, according to the degree of power the sulphur ought to have, before it is filled with liquor. A smell of the sulphureous acid is thus communicated to the liquor, but it goes off in a short time. Mr. Crocker says, when the fermentation ceases, and the liquor appears tolerably clear to the eye, it has also a piquant vinous sharpness upon the tongue, and if in this state the least hissing noise be heard in the fermenting liquor, the room is too warm, and atmospheric air must be let in at the doors and windows. 'Now,' he continues, 'is the critical moment, which the cyderist must not lose sight of; for if he would have a strong, generous, and pleasant liquor, all further sensible fermentation must be stopped. This is best done by racking off the pure part into open vessels, which must be placed in a more cool situation for a day or two; after which it may again be barrelled, and placed in some moderately cool situation for the winter.'

It is advisable in racking, that the stream from the racking-cock be small, and that the receiving-tub be but a small depth below the cock, lest, by exciting a violent motion of the parts of the liquor, another fermentation be brought up The feculence of the cyder may be strained through a filtering-bag, and placed among the second-rate cyders, but it must not be returned to the liquor designed for prime cyder.

It is observed by Mr. Knight, that 'after the fermentation has ceased, and the liquor is become clear and bright, it should instantly be drawn off, and not suffered on any account again to mingle with its lees; for these possess much the same properties as yeast, and would inevitably bring on a second fermentation. The best criterion to judge of the proper moment to rack off will be, he says, the brightness of the liquor; and this is always attended with external marks, which serve as guides to the cyder-maker. The discharge of fixed air, which always attends the progress of fermentation, has entirely ceased; and a thick crust, formed of fragments of the reduced pulp raised by the buoyant air it contains, is collected on the surface. The clear liquor being drawn off into another cask, the lees are put, he says, into small bags, similar to those used for jellies, being made, as noticed above; through these, whatever liquor the lees contain gradually

filtrates, becoming perfectly bright; and it is then returned to that in the cask, in which it has the effect, in some measure, of preventing a second fermentation, as already hinted. It appears, he says, to have undergone a considerable change in the process of filtration. The color is remarkably deep, its taste harsh and flat, and it has a strong tendency to become acetous; probably by having given out fixed, and absorbed vital air. Should it become acetous, which it will frequently do in forty-eight hours, it must not on any account, he says, be put into the cask. If however, the cyder, after being racked off, remains bright and quiet, nothing more is to be done to it till the succeeding spring; but if a scum collects on the surface, it must immediately be racked off into another cask; as this would produce bad effects if suffered to sink. If a disposition to ferment with violence again appears, it will be necessary, he thinks, to rack off from one cask to another, as often as a hissing noise is heard. The strength of cyder is much reduced, he says, as noticed above, by being frequently racked off; but this, he supposes, arises only from a large portion of sugar remaining unchanged, which adds to the sweetness, at the expense of the other quality. The juice of the fruits which produce very strong cyders, often remains muddy during the whole winter, and much attention must frequently be paid, to prevent an excess of fermentation.'

'The casks into which the liquor is put, whenever racked off, should always have been thoroughly scalded, and dried again; and each should want several gallons of being full, to expose a larger surface to the air of the atmosphere.' 'But,' he adds, 'should the cyder-maker neglect the above precautions, the inevitable consequence will be this: another fermentation will quickly succeed, and convert the fine vinous liquor he was possessed of into a sort of vinegar; and all the art he is master of will never restore it to its former richness and purity.'

He suggests, however, the following correctives:—'A bottle of French brandy, half a gallon of spirit extracted from the lees of cyder, or a pail full of old cyder, poured into the hogshead soon after the acetous fermentation is begun; but no wonder, continues he, if all these should fail, if the cyder be still continued in a close warm cellar. To give effect to either, it is necessary that the liquor be as much exposed to a cooler air as conveniently may be, and that for a considerable length of time. By such means it is *possible* fermentation may, in a great measure, be repressed: and if a cask of prime cyder cannot from thence be obtained, a cask of tolerable second-rate kind may. These remedies are innocent; but if the farmer or cyder-merchant attempt to cover the accident, occasioned by negligence or inattention, by applying any preparation of lead, let him reflect that he is about to commit an absolute and unqualified murder on those whose lot it may be to drink his poisonous draught. Such means should, therefore, on no account be ever had recourse to.'

The time of bottling depends greatly on the quality of the liquors themselves: good cyder can seldom be bottled with propriety until a year old, and sometimes not till two years. It is stated by the writer just mentioned, that in the month of April the cyder, in general, will be in a fit state for this operation; but that the critical time for this process is, when the liquor has acquired in the cask its highest degree of perfection: then, when the weather is fair, the barometer high, and the wind in some northerly point, let the bottles be filled, setting them by uncorked until the morning; then let the corks be driven very tightly into the necks of the bottles, tied down with small strong twine or wire, and well secured with melted rosin, or other material of the same nature.

Mr. Knight thinks, that cyders which have been made from good fruits, and have been properly manufactured, will retain a considerable portion of sweetness, in the cask, to the end of three or four years; but that the saccharine part, on which alone their sweetness depends, gradually disappears, probably by a decomposition and discharge of fixed air, similar to that which takes place in the earlier stages of their fermentation.

In our plate we give a perspective view of the machinery of the common cyderist, viz., the mill-house, mill, press, vat, and cask, with their appurtenances. A mill-house on an orchard-farm, is as necessary, Mr. Marshall observes, as a barn. It is generally one end of an out-building; or perhaps, an open shed, under which straw or small implements are occasionally laid up. The smallest dimensions, to render it any way convenient, are twenty-four feet by twenty; a floor thrown over it, at seven feet high; a door in the middle of the front, and a window opposite; with the mill on one side, the press on the other side of the window; as much room being left in front, towards the door, for fruit and utensils, as the nature of the mill and the press will allow. A B, the bottom or lower beam of the press; C D, the upper beam; 5, 6, 7, 8, 9, the uprights; 4, 4, *e*, *e*, spurs; Z, 2, 12, braces or cross-pieces; *a*, *b*, capitals; X, blocks; *g*, the screw; E, the back, or receiver; F, the cheese or cake of pommage, placed on G, the stage or basin; 10, 10, beams that support the pieces of which the basin is composed; 11, perpendicular pieces for supporting these beams; H, the buckler

P Q R is the circular trough of the apple-mill; T L V, compartments or divisions for different sorts of apples; M, the mill-stone; L M, axis of the mill-stone; N, the spring-tree bar. The apple-mill does not differ essentially from that of a common tanner's mill for grinding bark; and consists of a mill-stone from two feet and a half to four and a half in diameter, running on its edge in a circular stone trough, from nine to twelve inches in thickness, and from one to two tons in weight: the bottom of the trough in which the stone runs is somewhat wider than the thickness of the stone itself; the inner side of the groove rises perpendicularly, but the outer is levelled in such a manner as to make the top of the trough six or eight inches wider than the bottom, by which means there is room for the stone to run freely, and likewise for putting in the fruit, and stirring it up while grinding. The bed of a middle sized mill is about nine feet, some ten, and some twelve, the whole being composed of two, three, or four stones, bound

together with cramps of iron, and finished after being cramped in this manner. The best stones are found in the forest of Dean, generally a dark reddish gritstone, not calcareous; for if the stone was of a calcareous quality, the acid juice of the fruit would act upon it and spoil the liquor; a clean-grained grindstone grit is the fittest for the purpose. The runner is moved by means of an axle passing through the centre with a long arm reaching without the bed of the mill, for a horse to draw by; on the other side is a shorter arm, passing through the centre of the stone. An iron bolt, with a large head, passes through an eye in the lower part of the swivel, on which the stone turns into the end of the inner arm of the axis; and thus the double motion of it is obtained, and the stone kept perfectly upright. There ought also to be fixed on the inner arm of the axis, about a foot from the runner, a cogged wheel, working in a circle of cogs fixed upon the bed of the mill; these not only prevent the runner from sliding, which it is apt to do, when the mill is full; but likewise make the work more easy for the horse.

The bottom of the press ought to be made entirely of wood or of stone; the practice of covering it with lead being now well known to be pernicious. A few inches within its outer edges a channel is cut to catch the liquor as it is expressed, and convey it to a lip formed by a projection on that side of the bed opposite the mill; having under it a stone trough or wooden vessel, sunk within the ground, when the bed is fixed low to receive it. The press is worked with levers of different lengths, first a short, and then a longer one, both worked by the hand; and afterwards a bar, eight or nine feet in length, worked by a windlass. Mr. Marshall computes the expense of fitting up a mill-house at about £20 or £25, or on a small scale at £10 or £15, but if the stone has to be brought from a distance, the carriage will make a difference.

'Where iron-mills have been tried, this metal has been found to be soluble in the acid of apples, to which it communicates a brown color, and an unpleasant taste. No combination has been ascertained to take place between this acid and lead; but as the calx of this metal readily dissolves in, and communicates an extremely poisonous quality to, the acetous juice of the apple, it should never be suffered to come into contact with the fruit or liquor.' *Knight on the Apple and Pear.*

Fig. 2 is a plain and still more common apple-mill, used in Devonshire.

Fig. 3 is a cyder-mill in use in the south of France, worked on a circular platform of boards, and, instead of stone, the wheel or conical roller is of cast-iron. The fruit is thinly spread over the platform, and the roller moved round by one man or woman. From the rollers covering more breadth than the narrow wheels in use in England, more fruit is crushed in a short time by this sort of mill.

Another and very convenient cyder-mill is shown in fig. 4, and is made of two toothed or indented wooden cylinders of about nine inches in diameter, each being enclosed in the manner of other mills, having a feeder at the top; and being made so as to be turned by the hand The cylinders are so arranged as to be capable of being removed to a greater or less distance from each other, and thus the business advances in a regular progressive manner, from the first cutting of the fruit until the cylinders are brought so close together that a kernel cannot pass without being bruised; if a second pair of finer toothed cylinders be made to work under these, the pulp will be brought into a perfect state of fineness. It is with difficulty that the same degree of fineness can be effected by the horse-mill.

A hand-mill, where cyder is only made for private use, sometimes consists of a pair of fluted rollers working into each other. They are of cast-iron, hollow, about nine inches diameter, with flutes or teeth, about an inch wide, and nearly as much deep: two men work them by hand against each other. The fruit passes between them twice; the rollers being first set wide, to break it into fragments, and afterwards closer to reduce the fragments and the seeds.

Cyder-vats are vessels for receiving the pommage, or the cyder before it is racked off into the cask. They should be made of wood, as, where lead is employed, it is liable to be corroded by the acid. Of the casks we have already spoken.

Mr. Crocker observes that, in the districts of Hereford and Worcester, the following are considered as the best liquor fruits: the bennet apple, captain Nurse's kernel, Elton's yellow, Normandy apple, and the yellow or forest stire. And that, in the county of Somerset, the Jersey, the white sour, the margill, vallis apple, barn's-door, crab red-streak, Du-ann, Jack Every, coccagee, Clark's primo, Buckland, Pit crab, Slater's pearmain, Slater's No. 19, Slater's No. 20, Slater's No. 21, castle pippin, saw-pit, and the pomme apis, are supposed most valuable. But that in Devonshire, the most esteemed fruits are; the Seaverton red-streak, the sweet broady, the lemon bitter sweet, josey, Orcheton pippin, wine apple, marygold spice-apple, Ludbrook red-streak, green Cornish, the butter-box, red Cornish, broad-nosed pippin, cat's head, brandy-apple, Pine's red-streak, winter red, sweet pomme roi, and the Bickley red-streak. Marshall mentions the stire-apple, hagloe crab, the golden pippin, the old red-streak, and the woodcock, as favorite old cyder fruits, now on the decline. It was during the reign of Charles I. that the plantations of Herefordshire acquired the peculiar eminence which they yet retain, when by the spirited exertions of lord Scudamore, and other gentlemen of the county, Herefordshire 'became, in a manner, one entire orchard.' The principal markets for the fruit liquors of this county, are those of London and Bristol, whence great quantities are sent to Ireland, to the East and West Indies, and to other foreign markets, in bottles. The price of the common cyder is generally fixed once a year by a meeting of the dealers at Hereford fair, on the 20th of October.

Cyder Spirit, is a spirituous liquor drawn from cyder by distillation, in the same manner as brandy from wine. Its flavor is not agree-

able, but it may be entirely divested of it, and rendered perfectly pure by rectification. The traders in spirituous liquors are well acquainted with the value of such a spirit as this: they can give it the flavors of some other kinds, and sell it under their names, or mix it in large proportion with foreign brandy, rum, and arrack, in the sale, without danger of detection.

CYDER WINE, a kind of wine made from the juice of apples taken from the press and boiled, and which being kept three or four years is said to resemble Rhenish. The method of preparing it according to Dr. Rush of America, where it is much practised, consists in evaporating in a brewing copper the fresh apple juice till half of it be consumed. The remainder is then immediately conveyed into a wooden cooler, and afterwards put into a proper cask with an addition of yeast, and fermented in the ordinary way. The process is evidently borrowed from what has long been practised on the recent juice of the grape, under the term of vin cuit, or boiled wine, in Italy, and the islands of the Archipelago. This process has often become an object of imitation in the cyder counties, and particularly in the west of England. Dr. Fothergill made a variety of experiments to ascertain whether or not the liquor acquires any noxious quality from the copper in which it is boiled, and the result seemed to afford a strong presumption that the wine does contain a minute impregnation of copper. It is a curious chemical fact, he observes, that acid liquors, while kept boiling in copper vessels, acquire little or no impregnation from the metal, but presently begin to act upon it when left to stand in the cold.

CYDIAS, an ancient Greek painter who made a painting of the Argonauts in the eleventh Olympiad. This celebrated piece was bought by the orator Hortensius for 164 talents.

CYDNUS, in ancient geography, a river of Cilicia; rising in Mount Taurus, or rather in Antitaurus, north of Tarsus, through whose middle it ran, in a very clear and cold stream; falling into the sea at a place called Rhegma, a breach, the sea breaking in there, and affording the people of Tarsus a station or port for their ships. The water of the Cydnus is commended by Strabo, as of service in nervous disorders and the gout; it was so cold, however, that bathing in it had almost proved fatal to Alexander.

CYDONIA, or CYDON, in ancient geography, one of the three most illustrious cities of Crete, situated in the north-west of the island, with a port walled round. Stephen of Byzantium says, that it was first named Apollonia from Cydon the son of Apollo. Pausanias ascribes the founding of it to Cydon the son of Tegetus, who travelled into Crete. Herodotus affirms, that it was founded by the Samians, and that its temples were erected by them. Alexander, in the first book of the Cretans, informs us, that it received its name from Cydon the son of Mercury. Cydon was the largest city in the island; and was enabled to hold the balance between her contending neighbours. Phaleucus, general of the Phoceans, making an expedition into Crete with a fleet and a numerous army, invested Cydon both by sea and land; but, lost his army and his life before its walls. In succeeding times, when Metellus subdued the island, he assailed Cydon with all his forces; and, after combating an obstinate resistance, subjected it to the power of Rome. Cydon occupied the present situation of Canea; only extending half a league further towards St. Odero.

CY'GNET, *n. s.* Lat. from *cygnus*. A young swan.

I am the *cygnet* to this pale faint swan,
Who chaunts a doleful hymn to his own death.
Shakspeare. King John.

So doth the swan her downy *cygnets* save,
Keeping them prisoners underneath her wings.
Id. Henry VI.

Cygnets, from grey, turn white.
Bacon's Natural History.

Young *cygnets* are good meat, if fatted with oats; but, fed with weeds, they taste fishy.
Mortimer's Husbandry.

Next the changed god a *cygnet's* form assumes,
And playful Leda smooths his glossy plumes.
Darwin.

And she bent o'er him, and he lay beneath,
Hushed as the babe upon its mother's breast,
Drooped as the willow when no winds can breathe,
Lulled like the depth of ocean when at rest,
Fair as the crowning rose of the whole wreath,
Soft as the callow *cygnet* in its nest.
Byron. Don Juan.

CY'LINDER, *n. s.* } Κυλινδρος. A circular
CYLI'NDRICAL, *adj.* } body terminated by two
CYLIN'DRICK, *adj.* } flat surfaces. Partaking
CYLI'NDROID, *n. s.* } of the nature of a cylinder; having the form of a cylinder. A cylindroid is a body approaching to the figure of a cylinder.

The square will make you ready for all manner of compartments, bases, pedestals, plots, and buildings; your *cylinder*, for vaulted turrets, and round buildings.
Peacham.

The quantity of water which every revolution does carry, according to any inclination of the *cylinder*, may be easily found.
Wilkins.

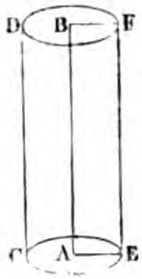
Minera ferri stalactitia, when several of the *cylindrick* striæ are contiguous, and grow to ether into one sheaf, is called brush iron ore.
Woodward's Natural History.

Obstructions must be most incident to such parts of the body where the circulation and the elastick fibres are both smallest, and those glands, which are the extremities of arteries formed into *cylindrical* canals.
Arbuthnot on Aliment.

Nymphs! your fine hands ethereal floods amass
From the warm cushion, and the whirling glass;
Beard the bright *cylinder* with golden wire,
And circumfuse the gravitating fire.
Darwin.

Pent in dark chambers of *cylindric* brass,
Slumbers in grim repose the sooty mass.
Id.

This knob or corner of a cloud in being attracted by the earth will become nearly *cylindrical*, as loose wool would do when drawn out into a thread, and will strike the earth with a stream of electricity, perhaps two or ten yards in diameter.
Id



CYLINDER, in geometry, a solid body, supposed to be generated by the rotation of a rectangle about one of its sides, as the figure C D E F generated by the revolution of the parallelogram A B E F round its side AB, which is the axis of the cylinder. See GEOMETRY.

CYLINDROID, in geometry, a solid body, approaching to the figure of a cylinder, but differing from it in some respects, as having the bases elliptical, but parallel and equal.

CYMA'R, *n. s.* Properly written simar. A slight covering; a scarf.

Her comely limbs composed with decent care,
Her body shaded with a slight *cymar*;
Her bosom to the view was only bare. *Dryden.*

CYMA'TIUM, *n. s.* Lat. from *κυμάτιον*, a little wave. A member of architecture, whereof one half is convex, and the other concave. There are two sorts, of which one is hollow below, as the other is above.

In a cornice, the gola, or *cymatium* of the corona, the coping, the modillions, or dentelli, make a noble show by their graceful projections. *Spectator.*

CY'MBAL, *n. s.* Lat. *cymbalum*. A musical instrument.

The trumpets, sackbuts, psalteries, and fifes,
Tabors, and *cymbals*, and the shouting Romans,
Make the sun dance. *Shakspeare. Coriolanus.*

If mirth should fail, I'll busy her with cares,
Silence her clamorous voice with louder wars;
Trumpets and drums shall fright her from the throne,
As sounding *cymbals* aid the lab'ring moon.
Dryden's Aurengzebe.

Ah! tinkling *cymbal*, and high sounding brass,
Smitten in vain! such music cannot charm
The eclipse, that intercepts truth's heavenly beam,
And chills and darkens a wide-wandering soul.
Cowper.

A dolphin now his sportive limbs he laves,
And bears the sportive damsel on the waves;
She strikes the *cymbal* as he moves along,
And wondering ocean listens to the song. *Darwin.*

Others their hands applausive beat,
Like *cymbals* sounding as they meet. *Sheridan.*

Her large black eyes, that flashed through her long hair
As it streamed o'er her; her blue veins that rose
Along her most transparent brow; her nostril
Dilated from its symmetry; her lips
Apart; her voice that clove through all the din,
As a lute's piereeth through the *cymbal's* clash,
Jarred but not drowned by the loud brattling.
Byron. Sardanapalus.

CYMBALS, ANCIENT, Gr. *κυμβαλον*. Thy cymbal was much used among the ancients. It was made of brass like our kettle drums, and, as some think, in their form, but smaller, and of different use. Ovid gives cymbals the epithet of genialia, because they were used at weddings and other diversions. Cassiodorus and Isidore call this instrument acetabulum, the name of a cup or cavity of a bone wherein another is articulated; and Xenophon compares it to a horse's hoof; whence it must have been hollow: which appears, too, from the figure of several other things denominated from it; as a basin, caldron, goblet, cask, and even a shoe, such as those of Empedocles, which were of brass. The ancient cymbals appear to have been very different from our kettle drums, and their use of another kind. To their exterior cavity was fastened a handle; whence Pliny compares them to the upper part of the thigh, and Rabanus to phials. They were struck against one another in cadence, and made a very acute sound. The invention of them was attributed to Cybele; whence their use in feasts and sacrifices; setting aside this occasion, they were seldom used but by dissolute and effeminate people. M. Lampe attributes the invention to the Curetes, who, as well as the Corybantes, were reputed to excel in the music of the cymbal. The Jews had their cymbals, or at least instruments which translators render cymbals; but as to their material and form, critics are not agreed.

CYMBALS, MODERN. The modern cymbal has been sometimes defined as a mean instrument, chiefly in use among vagrants, gypsies, &c. It consists of steel wire in a triangular form, whereon are passed rings, which are touched and shifted along the triangle with an iron rod held in the left hand, while it is supported in the right by a ring. Durandus says, that the monks sometimes use the word cymbal for the cloister-bell, which called them to the refectory. It is clear that our translators, at least, 1 Cor. xiii. 1, had this small kind of 'tinkling' instruments in view when they contrast *χαλκος ηχων*, sonorous brass, perhaps the sound of the trumpet, with *κυμβαλον αλαλαζον*, a tinkling cymbal.

But modern times have witnessed the extensive introduction of a very different cymbal amongst the military instruments of Europe. It is an instrument of loud percussion, adopted by us immediately from the east, and resembling the celebrated cymbals of Bacchus, which were evidently struck one against another, and would produce a sharp clamorous sound. They are employed as being useful for the loudness of their music in marking the due time and military step of a march. But the sounds produced are said to be inappreciable to the ear, and simply rhythmic or exharmonic.

CYME, or CUMA, in ancient geography, a city built by Pelops on his return from Greece. Cyme the Amazon gave it name, on expelling the inhabitants, according to Mela. Livy, Mela, Nepos, Pliny, and Tacitus use the Greek name Cyme, in preference to Cuma. It stood in Æolia, between the Myrina and Phocæa, and in Pentinger's map is set down nine miles from Myrina. From this place was the Sybilla Cumæa, called also Erythræa, from Erythræ, a neighbouring place. It was the country of Ephorus. Hesiod was a Cumean originally; his father coming to settle at Ascra in Bœotia.

CYMENE, in botany, a name given by the ancient Greeks to a plant with which they used to dye woollen stuffs yellow; and with which the women used also to tinge their hair; yellow being the favorite color in those ages. It is the same plant with the latea herba of the Latins; or what we call dyer's weed.

CYNÆGIRUS, an Athenian, celebrated for his extraordinary courage. He was brother to the poet Æschylus. After the battle of Marathon, he pursued the flying Persians to their ships, and seized one of their vessels with his right hand, which was immediately severed by the enemy. Upon this he seized the vessel with his left hand, and when he had lost that also, he still kept his hold with his teeth.

CYNANCHE, a species of quinsy, in which the tongue is inflamed and swelled, so that it hangs out beyond the teeth. Dr Cullen distinguishes five species of this disease; viz. 1. cynanche maligna; 2. cynanche parotidæa; 3. cynanche pharyngæa; 4. cynanche tonsillaris; and 5. cynanche trachealis. See MEDICINE.

CYNANCHUM, bastard dogsbane, in botany, a genus of the digynia order, and pentandria class of plants; natural order thirtieth, contortæ. The nectarium is cylindrical and quinquedentated. There are six species; of which the following are the most remarkable: viz. 1. C. acutum, commonly called Montpelier scammony; and 2. C. Monspeliacum, the round-leaved Montpelier scammony. They abound with a milky juice like the spurge, which issues out wherever they are broken; and this milky juice when concreted has frequently been sold for scammony. These plants propagate so fast by their creeping roots, that few people care to admit them into their gardens.

CYNA'NTHROPY, *n. s.* Κυων κυνος, and ανθρωπος. A species of madness in which men have the qualities of dogs.

CYNARA, the artichoke, in botany, a genus of the polygamia æqualis order, and syngenesia class of plants: CAL. dilated, imbricated with carnous squamæ, and emarginated with a sharp point. Of this genus there are eight species; of which only two are cultivated for use: viz. 1. C. cardunculus, the cardoon, greatly resembles the artichoke, but is of larger and more regular growth: the leaves being more upright, taller, broader, and more regularly divided: the stalks of the leaves blanched are the only edible parts of the plant. This is a very hardy plant, and prospers in the open quarters of the kitchen garden. It is propagated by seed sown annually in the full ground in March; either in a bed for transplantation, or in the place where they are designed to remain. 2. C. scolynius, the garden artichoke, has large, thick, perennial roots, crowned by a considerable cluster of large pennatifid, erect leaves, two or three feet long. In the middle are upright stalks rising a yard high, on the top of which is a large round scaly head, composed of numerous, oval, calycinal scales, enclosing the florets, sitting on a broad fleshy receptacle, which, with the fleshy base of the scales, is the eatable part of the plant. The varieties of this species are, 1. The conical green-headed French artichoke, having the small leaves terminated by spines, a tall stalk, the head somewhat conical, and of a light green color, with the scales pointed at top, opening and turning outward. 2. The globular-headed red Dutch artichoke, having leaves without spines, a strong stalk, the head large, globular, a little compressed at top, and of a reddish green color; broad obtuse scales emarginated at top, growing close, and turning inward. Of these varieties the last is deservedly the most esteemed, both on account of its superiority in size and the agreeableness of its flavor. Both varieties are perennial in their root; but the leaves and fruit-stem die to the ground in winter; and the roots remaining, send up fresh leaves and stems every summer, producing a supply of artichokes for twenty years if required. The flowers and seed of all the plants of this genus are produced in the centre of the head; the scales of which are the proper calyx of the flower, which consists of numerous small bluish florets, succeeded by downy seeds sitting naked on the receptacle. Both the varieties of the artichoke are propagated by slips or suckers, arising annually from the stool or root of the old plants in spring, which are to be taken from good plants of any present plantation in March or the beginning of April, and planted in the open quarter of the kitchen garden, in rows five feet asunder; and they will produce artichokes the same year in autumn. It should however be remarked, that, though artichokes are of many years duration, the annual produce of their fruit will gradually lessen in the size of the eatable parts after the third or fourth year, so that a fresh plantation should be made every three or four years.

CYNARCTO'MACHY. Κυων, αρκτος, μαχη. A word coined by Butler, to denote bear-baiting with a dog.

> That some occult design doth lie
> In bloody *cynarctomachy*,
> Is plain enough to him that knows
> How saints lead brothers by the nose.
> *Hudibras.*

CYNEAS, or CINEAS, the friend of Pyrrhus and scholar of Demosthenes, who flourished A. A. C. 275. Pyrrhus and he wrote a treatise of War, quoted by Tully.

CYNEGE'TICKS, *n. s.* Κυνεγητικα. The art of hunting; the art of training and hunting with dogs.

> There are extant, in Greek, four books of *cynegeticks*, or venation. *Browne's Vulgar Errours.*

CY'NICK, *n. s.* & *adj.* } Κυνικος. A philo-
CY'NICAL, *adj.* } sopher of the snarling or currish sort; a rude man; a snarler; a misanthrope. Having currish qualities; brutal; snarling; satirical.

> How vilely doth this *cynick* rhime!—
> Get you hence, sirrah; saucy fellow, hence.
> *Shakspeare.*
>
> Or been the manes of that *Cynic* spright
> Cloathed with some stubborn clay and led to light?
> Or do the relic ashes of his grave
> Revive and rise from their forsaken cave? *Hall.*

> He doth believe that some new-fangled wit (it is his *cynical* phrase) will some time or other find out his art. *Wilkins.*

> Without these precautions the man degenerates into a *cynick*, the woman into a coquette; the man grows sullen and morose, the woman impertinent and fantastical. *Addison.*

> The *Cynics* of old, and some of the Stoics, maintained, that in words there is no indelicacy; that there can be no harm in speaking of any thing that is

natural; and that, if we may speak without blame of any one crime, or any one part or function of the human body, we may, in like manner, of any other. But this is vile sophistry, tending to the utter debasement of man, and founded in the grossest ignorance of human nature and human language. *Beattie.*

CYNICS, a sect of ancient philosophers, who valued themselves upon their contempt of riches and of pomp, of the arts and sciences, and of every thing in short except virtue and morality. The cynic philosophers owe their origin and institution to Antisthenes of Athens, a disciple of Socrates; who being asked of what use his philosophy had been to him, replied, 'It enables me to live with myself.' Diogenes was the most famous of his disciples, in whose character the system of this philosophy appears in its greatest perfection. See DIOGENES. These sages are said to have regarded chastity and modesty as weaknesses; and coarseness, even to indelicacy, was certainly one of their characteristics. They argued that what was right to be done, might be done at all times and in all places. Their chief principle, indeed, in common with that of the stoics, was, that we should follow nature. But the stoics clearly included the government of reason, in the rule of nature, which the cynics, for the greater part, rejected.

CYNIPS, in zoology, a genus of insects belonging to the hymenoptera order. The mouth is armed with jaws, but has no proboscis: the sting is spiral, and mostly concealed within the body. There are many species. We can only mention two:

1. C. quercus folii, or oak-leaf cynips, is of a burnished shining brown color. The antennæ are black; the legs and feet of a chestnut brown; and the wings white, but void of marginal spots. It is in the little smooth, round, hard galls, found under the oak leaves, generally fastened to the fibres, that this insect is produced, a single one in each gall. These latter are ligneous, of a hard compact substance, formed like the rest, by the extravasation of the sap of the leaf, occasioned by the puncture of the gall fly when it deposits its eggs. Sometimes, instead of the cynips, there is seen to proceed from the gall a larger insect, of a brown color, which is an ichneumon. This ichneumon is not the real inmate of the gall, or he that formed it.

2. C. quercus gemmæ, or oak bud cynips, is of a very dark green, slightly gilded: its antennæ and feet are of a dun color, rather deep. It deposits its eggs in the oak buds, which produce one of the finest galls, leafed like a rosebud beginning to blow. When the gall is small, that great quantity of leaves is compressed, and they are set one upon another like the tiles of a roof. In the centre of the gall there is a kind of ligneous kernel, in the middle of which is a cavity; and in that is found the little larva, which feeds there, takes its growth, undergoes its metamorphosis, and breaks through the enclosure of that kind of cod in order to get out. The whole gall is often near an inch in diameter, sometimes more when dried and displayed; and it holds to a branch by a pedicle.

CYNOBELINE, a king of the South Britons, who flourished in the reign of Claudius, and fought several battles with the Romans under Plautius, the prætor; about A. D. 43–46.

CYNOGLOSSUM, hound's tongue, in botany, a genus of the monogynia order, pentandria class of plants; natural order forty-first, asperifoliæ: COR. funnel-shaped, with its throat closed up by little arches formed in it; the seeds depressed, and affixed to the style or receptacle only on their inner side. There are eight species, not remarkable for beauty. C. officinale, the common greater hound's tongue, was formerly used in medicine, and its root supposed to possess narcotic virtues; but it is discarded from the present practice. The smell of the whole plant is very disagreeable. Goats eat it: sheep, horses, and swine refuse it.

CYNOMETRA, in botany, a genus of the monogynia order and decandria class of plants; CAL. tetraphyllous: ANTH. bifid at top; the legumen carnous, crescent-shaped, and monospermous. Species two, Indian trees.

CYNOMORIUM, in botany, a genus of the monandria order and monœcia class of plants: natural order fiftieth, amentaceæ: CAL. imbricated catkin: COR. none: one style; and one roundish seed. Species one only.

CYNOPHONTIS, in antiquity, a festival observed in the dog-days at Argos, and so called *απο τηϛ κυναϛ φονειν*, i. e. from killing dogs; because it was usual on this day to kill all the dogs they met with.

CYNOSARGES, a place in the suburbs of Athens, named from a white or swift dog, who snatched away part of the sacrifice offering to Hercules. It had a gymnasium, in which strangers or those of the half blood performed their exercises; the case of Hercules, to whom the place was consecrated. It had also a court of judicature, to try illegitimacy, and to examine whether persons were Athenians of the whole or half blood.

CYNOSCEPHALÆ, in ancient geography, a place in Thessaly, near Scotussa; where the Romans, under Q. Flaminius, gained a great victory over Philip, son of Demetrius king of Macedon. These Cynoscephalæ were small tops of several equal eminences; named from their resemblance to dogs' heads, according to Plutarch.

CYNOSSEMA, the tomb of Hecuba, on the promontory Mastusia, over against Sigeum, in the south of the Chersonesus Thracica; named either from the figure of a dog, to which she was fabled to have been changed, or from her sad reverse of fortune.

CYNOSURA, in astronomy, a denomination given by the Greeks to ursa minor, or the little bear, from *κυνοσηρα*, the dog's tail. This is the constellation next our pole, consisting of seven stars; four of which are disposed like the four wheels of a chariot, and three lengthways representing the beam; whence some give it the name of the chariot, or Charles's wain. See CYNOSURE.

CYNOSURA, in mythology, a nymph of Ida, in Crete, said to have nursed Jupiter, who changed her into a star.

CYNOSURA, CYNOSURÆ, or CYNOSURIS, in ancient geography, a place in Laconia; but whether maritime or inland, is uncertain. Here Æsculapius was buried.

CY'NOSURE, *n. s.* From *κύνος ουρα*. The star near the north pole, by which sailors steer.

Towers and battlements it sees
Bosomed high in tufted trees,
Where perhaps some beauty lies,
The *cynosure* of neighbouring eyes. *Milton.*

CYNOSURUS, in botany, dog-tail grass; a genus of the digynia order and triandria class of plants; natural order fourth, gramina: CAL. bivalved and multiflorous; the receptacle proper, unilateral, and foliaceous. There are ten species, four of which are natives of Britain, viz. the cristatus, or crested dog-tail grass; the echinatus, or rough dog-tail grass; the cæruleus, or blue dog-tail grass; and the paniceus or bearded dog-tail grass.

CYNTHUS, in ancient geography, a mountain of the island Delos, so high as to overshadow the whole island. On this mountain Latona was fabled to have brought forth Apollo and Diana; hence called Cynthius and Cynthia.

CYNURIA, or CYNURIUS AGER, in ancient geography, a district of Laconia, on the confines of Argolis, that proved a perpetual bone of contention between the Argives and Spartans.

CY'ON. See CION.

Gather *cyons* for graffs before the buds sprout.
Evelyn.

CYPERUS, in botany, a genus of the monogynia order and triandria class of plants; natural order third, calamariæ. The glumes are paleaceous, and imbricated towards each side; the corolla is wanting, and there is one naked seed. There are thirty species; the only remarkable are,

1. C. longus, the English, Flemish, or long sweet cyperus, grows in the water, and along banks and river sides. Its root is as thick as an olive, full of little knots or specks, of an oblong figure, gray color, sweet and somewhat sharp taste, and almost without smell when it is newly taken out of the ground. It is much used by perfumers and glovers.

2. C. rotundus, the round cyperus, is a native of the East Indies, and grows by the sides of rivulets and ditches. The root is knotty, wrapped round with fibrous strings, not easy to break, of a brown color without any gray within; of a pleasant scent, especially when fresh and well dried; the leaves are green, and resemble those of the reed and leek. The roots of both species are esteemed cordial, diuretic, cephalic, resisters of poisons, and expellers of wind.

CY'PHER. See CIPHER.

CY'PHERING, *n. s.* Skill in arithmetic; the art of arithmetic.

Is a fine clerk, and has his *cyphering* perfect.
Ben Jonson.

CYPHON, in antiquity, a kind of punishment used by the Athenians. It was a collar made of wood; so called because it constrained the criminal to bow down his head.

CYPHONISM, CYPHONISMUS, from *κυφων*, derived from *κυφος*, crooked, a kind of torture or punishment in use among the ancients. The learned are at a loss to determine what it was. Some suppose it to be that mentioned by St. Jerome, in his Life of Paul the Hermit, chap. 2, which consisted in smearing the body over with honey, and thus exposing the person, with his hands tied, to the warm sun, to invite the flies and other vermin to torment him.

CYPRÆA, the gowrie, in zoology, a genus of insects belonging to the order of vermes testacea. It is an animal of the limax or snail kind; the shell is one involuted, subovated, obtuse, smooth valve. The aperture on each side is linear, longitudinal, and teethed. There are forty-four species, distinguished by the form of their shells. This genus is called cypræa and venerea from its being peculiarly dedicated to Venus; who is fabled to have endowed a shell of this genus with the powers of a remora, so as to impede the course of the ship which was sent by Periander, tyrant of Corinth, with orders to mutilate the young nobility of Corcyra.

CY'PRESS-TREE, *n. s.* Lat. *cupressus*. A tree anciently used in funerals; thence, poetically, the emblem of mourning. See CUPRESSUS.

He taketh the *cypress* and the oak, which he strengtheneth for himself among the trees of the forest. *Isaiah* xliv. 14.

The aspine, good for staves, the *cypresse* funerall.
Spenser. Faerie Queene.

In ivory coffers I have stuffed my crowns;
In *cypress* chests my arras counterpanes.
Shakspeare.

Poison be their drink,
Their sweetest shade a grove of *cypress* trees.
Id. Henry VI.

Bind ye my brows with mourning *cyperisse*,
And palish twigs of deadlie poplar tree. *Hall.*

Poplars and alders ever-quivering played,
And nodding *cypress* formed a fragrant shade.
Pope's Odyssey

Long aisles of *cypress* waved their deepened glooms,
And quivering spectres grinned amid the tombs.
Darwin.

Though no funereal *cypress* shade thy tomb,
For thee the wreaths of Paradise shall bloom.
Huddesford.

Oh, snatched away in beauty's bloom,
On thee shall press no ponderous tomb;
But on thy turf shall roses rear
Their leaves, the earliest of the year;
And the wild *cypress* wave in tender gloom.
Byron. Hebrew Melodies.

CYPRESS. See CUPRESSUS.

CYPRIANUS (Thascius-Cæcilius), a father of the church, born at Carthage, about the end of the second or beginning of the third century. His parents were heathen; and he himself continued such till the last twelve years of his life. Applying early to the study of oratory, he taught rhetoric in Carthage with the highest applause. His conversion is fixed by Pearson, A. D. 246, at Carthage, where, as St. Jerome observes, he had often employed his rhetoric in the defence of paganism. Cyprian, although a married man, as soon as he was converted, resolved upon a state of continence, which was then thought a high degree of piety. He wrote ably in defence of Christianity, and addressed to Donatus his first production De Gratiâ Dei. He next composed a piece De Idolorum Vanitate, upon the vanity of idols. Cyprian was now ordained priest, and, when the bishop of Carthage died,

none was judged so proper to succeed him as Cyprian. His first episcopal engagement was to draw up a piece De Habitu Virginum, on the dress of young females; in which he inculcates many lessons of modesty and sobriety. In 249 Decius issued very severe edicts against the Christians; and in 250 the heathens, in the circus and amphitheatre of Carthage, insisted upon Cyprian's being thrown to the lions. Upon this he withdrew from Carthage, and wrote, in his retreat, some excellent letters to the Libellatici, or those pusillanimous Christians, who procured certificates of the heathen magistrates, to show that they had complied with the emperor's orders, in sacrificing to idols. At his return to Carthage he held several councils on the repentance of those who had fallen off during this persecution, and other points of discipline; he opposed the schemes of Novatus and Novatianus; and contended for the rebaptising of those who had been baptised by heretics. At last he died a martyr in the persecution under Valerian and Gallienus, in 258. Cyprian wrote eighty-one letters, and several treatises. The best editions of his works are those of Pamelius in 1568; of Rigaltius in 1648; and of Oxford in 1682.

CYPRINUS, in ichthyology, a genus of fishes belonging to the order of abdominales. The mouth is toothless; there are three rays in the gills; the body is smooth and white; and the belly fins have frequently nine rays. There are thirty-one species, principally distinguished by the number of rays in the vent-fin. The most remarkable are 1. C. alburnus, the bleak. These fish keep together in large shoals. At certain seasons they seem to be in great agonies: they tumble about near the surface of the water, and are incapable of swimming far from the place; but in about two hours they recover and disappear. Fish thus affected, the Thames fishermen call mad bleaks. They seem to be troubled with a species of Gordius, or hair worm, which torments them so, that they often rise to the surface and die. The bleak seldom exceeds five or six inches in length. Artificial pearls are made of the scales of this fish, and probably also with those of the dace. They are beaten into a fine powder, then diluted with water, and introduced into a thin glass bubble, which is afterwards filled with wax. The French were the inventors of this art. 2. C. auratus, the golden fish, a small fish domesticated by the Chinese, and generally kept for ornament in their courts and gardens. They breed them in small ponds made for the purpose, in basins, and even in porcelain vessels. This fish is no larger than our pilchard. The male is of a bright red color from the top of the head to the middle of the body: the rest is of a gold color: but it is so bright and splendid, that the finest gilding cannot approach it. The female is white: but its tail and half of its body resemble the lustre of silver. F. du Halde, however, observes, that a red and white color are not always the distinguishing marks of the male and female; but that the females are known by several white spots which are seen round the orifices that serve them as organs of hearing, and the males, by having these spots much brighter. Gold fish are light and lively; they love to sport on the surface of the water, soon become familiarised, and may even be accustomed to come and receive their food on sounding a small rattle. Great care is necessary to preserve them; for they are extremely delicate, and sensible of the least injuries of the air: a loud noise, such as that of thunder or cannons, a strong smell, a violent shaking of the vessel, or a single touch, will oft-times destroy them. These fish live with little nourishment: those small worms which are engendered in the water, or the earthy particles that are mixed with it, being sufficient for their food. In winter they are removed from the court to a warm chamber, where they are kept, generally shut up in a porcelain vessel. During that season they receive no nourishment; however, in spring, when they are carried back to their former basin, they sport and play with the same strength and liveliness as they did the preceding year. In warm countries these fish multiply fast, provided care be taken to collect their spawn, which floats on the water, and which they almost entirely devour. This spawn is put into a particular vessel exposed to the sun, and preserved there until vivified by the heat: gold-fish, however, seldom multiply when they are kept in close vases, because they are then too much confined. In order to render them fruitful, they must be put into reservoirs of considerable depth, in some places at least, and which are constantly supplied with fresh water. They were first introduced into England about A. D. 1691; but were not generally known till 1728, when a great number were brought over, and presented to Sir Matthew Dekker, and by him circulated round the neighbourhood of London, from whence they have been distributed to most parts of the country. 3. C. brama, the bream, is an inhabitant of lakes, or the deep parts of still rivers. It is a fish that is very little esteemed, being extremely insipid. 4. C. carpio, the carp. This was introduced into England about 1514, by Leonard Maschal. Russia wants these fish at this day. Sweden has them only in the ponds of people of fashion. They chiefly abound in the rivers and lakes of Polish Prussia, where they are sometimes taken of a vast size. They are there a great article of commerce, and sent in well-boats to Sweden and Russia. The merchants purchase them out of the waters of the noblesse of the country, who draw a good revenue from this article. They grow also to a very great size: some authors speak of carp 200 lbs. in weight, and five feet in length. They are prodigious breeders: the quantity of roe has been sometimes found so great, that when taken out and weighed against the fish itself, the former has been found to preponderate. From the spawn of this fish caviare is made for the Jews, who hold the sturgeon in abhorrence. The carp is extremely cunning, and is sometimes styled the river fox. They will sometimes leap over the nets, and escape that way; at other times they will immerse themselves so deep in the mud, as to let the net pass over them. They are also very shy of taking a bait; yet at the spawning time they are so simple as to suffer themselves to be tickled, handled, and caught by any body that will attempt it. This fish is apt to mix its milt with the roe of other fish; from

which is produced a spurious breed. 5. C. cephalus, the chub, is a very coarse fish and full of bones. It frequents the deep holes of rivers; and in summer commonly lies on the surface, beneath the shade of some tree or bush. It is very timid, sinking to the bottom on the least alarm, even at the passing of a shadow, but soon resumes its former situation. It feeds on worms, caterpillars, grasshoppers, and other coleopterous insects that happen to fall into the water; and it will even feed on cray-fish. It will rise to fly. Some of this kind have been known to weigh eight or nine lbs. 6. C. barbus, the barbel, a common inhabitant of most fresh waters in Europe, and easily distinguished from the other species of cyprinus, by the upper jaw being advanced far beyond the lower one, and in having the four beards appendant, from which the appropriate name of barbus or barbel is derived. This fish, during the summer, prefers the rapid currents and shallows of rivers, and retires at the approach of winter to the more full and deeper places. They live in societies; lurking in holes along the sides of the water under shelter of the steepest banks, and feed on smaller fish, and worms and flesh of all kinds, for which they dig in the banks like swine. In the day-time they love to lurk occasionally among weeds, and between the stones in retired parts of the river, and wander out at night in search of prey. They spawn in April, and begin to be in season in May and June. The flesh of the barbel was never in great esteem for the table. Mr. Pennant quotes a passage in Ausonius, which, as he observes, is no panegyric on its excellence, for he lets us know it loves deep waters, and that, when it grows old, it is not absolutely bad:

> Laxos exerces barbe natatus
> Tu melior pejore ævo, tibi contigit uni
> Spirantum ex numero non inlaudata senectus.

And he adds himself, that 'they are the worst and coarsest of fresh-water fish, and seldom eaten but by the poorer sort of people, who sometimes boil them with a bit of bacon to give them a relish.' 'The barbel,' says old Walton, 'though he be of a fine shape, and looks big, yet he is not accounted the best fish to eat, neither for his wholesomeness nor his taste; but the male is reputed much better than the female, whose spawn is very hurtful.' 7. C. gobio, the gudgeon, is generally found in gentle streams, and is of a small size, the largest not exceeding half a pound weight. They bite eagerly; and are assembled by raking the bed of the river; to this spot they immediately crowd in shoals, in expectation of food. 8. C. leuciscus, the dace, is gregarious, haunts deep still waters, is a great breeder, very lively, and during summer is very fond of frolicking near the surface of the water. It never exceeds the weight of a pound and a half; the scales are smaller than those of the roach. 9. C. rutilus, the roach, is a common fish found in many of the deep still rivers of this country. They are gregarious, keeping in large shoals. It has never been known to exceed five lbs. in weight. 10. C. tinca, the tench, was treated with the same disrespect by the ancients as the barbel: but is now in much more repute. It has by some been called the physician of the fish; and its slime has been said to be of so healing a nature, that the wounded fishes apply it as a styptic. In this country it is reckoned a wholesome and delicious food; but the Germans are of a different opinion. By way of contempt they call it the shoemaker. Gesner even says that it is insipid and unwholesome. It does not commonly exceed four or five lbs., though some have been known to weigh ten, and even twenty. They love still waters, and are rarely found in rivers; they are easily caught. They are thick in proportion to their length. The color of the back is dusky; the corial and ventral fins of the same color; the head, sides, and belly, of a greenish cast, most beautifully mixed with gold, which is in its greatest splendor when the fish is in highest season.

CYPRIPEDIUM, the lady's slipper, in botany, a genus of the diandria order, and gynandria class of plants: natural order seventh, orchideæ. The nectarium is ventricose, inflated, and hollow. There are three species, of which only one, viz. C. calceolus, is a native of Britain. It grows in rough ground in different parts of the island. The other two species are natives of America. None of them are easily propagated in gardens, and therefore must be transplanted from those places where they are natives.

CY'PRUS, *n. s.* I suppose from the place where it was made; or corruptly from cypress, as being used in mourning, says Dr. Johnson. A thin transparent black stuff.

> A *cyprus*, not a bosom,
> Hides my poor heart! *Shakspeare.*

> Lawn as white as driven snow,
> *Cyprus* black as e'er was crow.
> *Id. Winter's Tale.*

CYPRUS, or KUPRIS, as it is called by the Turks, is the most important island of the Levant, and subject to Turkey. It is situated between 33° and 36′ E. long., and 30° and 34′ N. lat. It is about 150 miles in length by seventy-five broad, and is traversed from east to west by two remarkable mountain ranges, one of which yielded the third Olympus of the ancient mythology. The whole are covered with snow during the winter months, but seem only to render the heat of summer more oppressive. This island was called Macaria, the happy, by the Greeks. Homer celebrates its fertility, calling it by its present name, in Hymn.:

> Σεύατ' ἐπὶ Τροίην, προλιπεῖσι ἐυώδεα Κύπρον.

It is also known in history by the names of Acamantis, Æ'rosa, Amathus, Cerastis, Colinia, Paphia, Salaminia, and Spechia: but its most common name was that which it still bears. The principal towns of ancient Cyprus were Paphos, Citium, Amathus, Salamis, Idalium, Lapathus, Arsinoe, &c. There were three celebrated temples here: two dedicated to Venus, who was said to be born here, and was called the Cyprian queen, and one to Jupiter. The females of the island were proverbially dissipated.

Cyprus, according to Eratosthenes, was first discovered by the Phœnicians two or three gene-

rations before Asterius and Minos, kings of Crete; that is, according to Sir Isaac Newton's computation, 2006 years before the Christian era. It was then so full of wood that it could not be tilled, and the Phœnicians first cut down that wood for melting copper, with which the island abounded; afterwards, when they began to sail without fear on the Mediterrancan, that is, after the Trojan war, they built numerous vessels of this wood. But Josephus informs us, that the descendants of Chittim, the son of Javan, and the grandson of Japhet, were the original inhabitants of Cyprus. According to his account, Chittim, seeing his brother Tarshish settled in Cilicia, where he built the city of Tarsus, settled with his followers in this opposite island; and either he or his descendants laid the foundations of Citium, which, according to Ptolemy, was the most ancient city in the island. As Cyprus was too narrow to contain the great numbers who attended him, he left here as many as might serve to people the country, and with the rest passed over into Macedon. Cyprus was divided among several petty kings till the time of Cyrus. He subdued them all; but left each in possession of his kingdom, obliging them only to pay him an annual tribute, and to send supplies of men, money, and ships, when required. The Cyprian princes lived thus subject to the Persians till the reign of Darius Hystaspis, when they attempted, but with little success, to shake off the yoke; their forces being entirely defeated, and themselves again obliged to submit. They made another more successful attempt about A. A. C. 357; but they could never become entirely independent. They submitted, it is probable, to Alexander the Great, though historians are silent as to this event. On his death, the dominion of Cyprus was disputed by Antigonus and Ptolemy. At last Antigonus prevailed, and the whole island submitted to him about A. A. C. 304. He and his son Demetrius kept possession of it for eleven years, when it was recovered by Ptolemy, and quietly possessed by him and his descendants till A. A. C. 53, when it was unjustly seized by the Romans. In the time of Augustus, it began to be ranked among the proconsular provinces, and to be governed by magistrates sent thither by the senate. In 648 it was conquered by the Saracens; but recovered by the Romans in 957. They held it, however, but for a very short time, and the barbarians kept possession of it till the time of the crusades. It was then reduced by Richard I. of England, who gave it to the princes of the Lusignan family, who held it till A. D. 1570. They divided it into twelve provinces, in each of which was a capital city, from which the province was denominated. So considerable was the island at this time, that besides the cities abovementioned, and others of less note, it contained 800 villages. In 1570 it was taken by the Turks, and it has ever since continued under their yoke.

Cyprus has no river, and the torrents that descend from the mountains in winter do not reach the sea in summer, but form unhealthy stagnant lakes and marshes in the low grounds. It is generally fertile, producing wine, oil, cotton, silk, and pasture; but has large tracts of fores In minerals it is rich, having mines of gold and silver, and yielding emeralds, rock-crystal, red jasper, agate, amianthus, terre d' ombre, and other minerals, besides the Paphian diamond. It has no wild animals but foxes and hares. The population is, according to Olivier, 60,000, half Greeks and half Turks; according to Malte Brun 83,000. Dr. Clarke says that its present state may be expressed in a few words. 'Agriculture neglected; inhabitants oppressed; population destroyed; pestiferous air; contagion; poverty; indolence; desolation.'

The bay of Salinas, between Cape Grego and Cape Tagista, or Chiti, is pointed out by the highest summit of the island, Mount Cius, or Rusie, being directly over it, whence it bears west. Larnaca, on the east shore of this bay, has a tolerable road even in winter, though exposed to the south-east and south. The town, which is a heap of ruins, is half a mile from the shore, on which is a suburb on the site of the ancient Citium: in the vicinity are many salt marshes, whence the name of the bay, which afford considerable quantities of salt, but render the air unhealthy. Salinas (Salamis) is at the head of the gulf; it has a citadel falling to ruin.

The Bay of Limasole, or Limisso, is sheltered on the west by point Della Gatta: the village at the head of the bay is supposed to stand on the site of Amathonte, and a league east of it are considerable ruins. Piscopia is a village east of the south point of the island, and in the most fertile part of it. On the west coast is Baffa, supposed to be on the site of Paphos: it is a small town with a fort and port for small vessels; the town is on an eminence one mile from the port, and is entirely inhabited by Greeks. Solea (Solœ and Æpeia) is on the north coast, as are Cerino (Ceronia), a village of 200 inhabitants with a castle in good order, and a small port within two rocks, but open to the north and unsafe in winter, Maceria (Macaria and Aphrodisum), and Artemisia.

The commerce of Cyprus is considerable, exporting of its own produce cotton, which is considered the best of the Levant, 5000 bags of 600 lbs. each, chiefly to Venice, Holland, and England; silk, 25,000 bags of 300 lbs. each; wool, 500 bags of 600 lbs. each; wine chiefly to Venice and Leghorn; coloquintida, 100 quintals, chiefly to Holland and Leghorn; laudanum, madder, chiefly to France; cochineal a small quantity; soda to Marseilles; turpentine to Venice; green earth for painters, and brown umber, chiefly to Holland; corn, though prohibited, finds its way out of the island; salt to Syria and Constantinople; carob beans, pitch, tar, and planks, in small quantities, and some manufactured silks and cottons. The exports are chiefly paid for in specie. About 600 European vessels are computed to visit the island annually.

Wine is the staple product of this island. Its grapes, yielding a juice which is almost a concentrated essence, are considered among the richest and most luscious in the world. The wines made from them strongly resemble Tokay, and, in the language of the east, are said to have power to restore health and youth to the most exhausted frames. They are kept in casks, without any other precaution to exclude the

CYRENAICS, a sect of ancient philosophers, so called from their founder Aristippus of Cyrene, a disciple of Socrates. The great principle of their doctrine was, that the supreme good of man in this life is pleasure; whereby they not only meant a privation of pain, and a tranquillity of mind, but an assemblage of all mental and sensual pleasures, particularly the last. Cicero makes frequent mention of Aristippus's school; and speaks of it as yielding debauchees. Three disciples of Aristippus, after his death, divided the sect into three branches, viz. the Hegesiac school, the Annicerian, and the Theodoran; from the names of their authors. Under this division it languished and sunk.

CYRENE, in ancient geography, the capital of Cyrenaica, and one of the five cities called Pentapolis, distant from Apollonia, its sea-port, ten miles, situated on a plain of the form of a table, according to Strabo. It is now called Caiboan.

CYRILL (St.), bishop of Jerusalem, succeeded Maximus in 350. He was afterwards deposed for selling the treasures of the church, and applying the money to the support of the poor during a great famine. Under Julian he was restored to his see, and firmly established in all his honors under Theodosius; in which he continued unmolested to his death in 386. The remains of this father consist only of twenty-three catecheses, and one letter to the emperor Constantius.

CYRILL (St.), patriarch of Alexandria, succeeded Theophilus, his uncle, in 413. Scarcely was he installed, when he began to exert his authority with great vigor; and drove the Novatians and Jews from Alexandria, permitting their wealth and synagogue to be taken from them. This proceeding highly displeased Orestes, the governor. Upon which a civil war broke out between them; many tumults were raised and some battles fought in the very streets o. Alexandria. St. Cyrill also distinguished himself by his zeal against Nestorius bishop of Constantinople, who, in some of his homilies, had asserted that the Virgin Mary ought not to be called the mother of God. The dispute at first proved unfavorable to Cyrill, whose opinion was not only condemned, but himself deprived of his bishopric and thrown into prison. But he was soon after released, and gained a complete victory over Nestorius, who in 431 was deposed from his see of Constantinople. Cyrill returned to his see at Alexandria, where he died in 444. St. Cyrill also wrote against Theodorus of Mopsuesta, Diodorus of Tarsus, and Julian the Apostate. He composed commentaries on St. John's gospel, and wrote several other books. His works were published in Greek and Latin in 1638, in six volumes folio.

CYRUS THE GREAT, the founder of the united empire of the Medes and Persians. The two chief historians, who have written the life of Cyrus, are Herodotus and Xenophon; but their accounts of him are extremely different. The former tells us, that Astyages king of the Medes, dreaming that a vine sprung from the womb of his daughter Mandane, the branches whereof overshadowed all Asia, was told by the soothsayers, that this portended the future power and greatness of a child who should be born of his daughter; and further, that this child should deprive him of his kingdom. Astyages, to prevent the accomplishment of the prediction, married his daughter to Cambyses, a Persian of mean condition, and commanded one of his officers, named Harpagus, to destroy the infant as soon as it came into the world. Harpagus, fearing the resentment of Mandane, put the child into the hands of the king's shepherd. The shepherd's wife, we are told, was so extremely touched with the beauty of Cyrus, that she desired her husband rather to expose her own son, who was born some time before (a story equally unnatural and incredible), and preserve the young prince. Thus Cyrus was brought up among the shepherds of the king, and one day, as the neighbouring children were at play together, being chosen for their prince or chief, he punished one of his comrades with some severity, and the child's parent complained to Astyages. This prince sent therefore for the youthful Cyrus, and observing something noble in his air, together with a great resemblance of his daughter Mandane, he made particular enquiry into his history, and discovered that Cyrus was his grandson. Harpagus, who was the instrument of preserving him, was now punished with the death of his own son; but Astyages, believing that the royalty which the soothsayers had promised to the young prince, was only that which he had lately exercised among the shepherds' children, laid aside his fears. Cyrus being grown up, Harpagus disclosed the secret of his birth to him, with the manner in which he had delivered him from his grandfather's cruelty. He encouraged him to come into Media, and promised to furnish him with forces, in order to make him master of the country, and depose Astyages. Cyrus now, therefore, engaged the Persians to take arms against the Medes, marched at the head of them to meet Astyages, defeated him, and possessed himself of Media. He carried on many other wars; and at length sat down before Babylon, which, after a long siege, he took.

Xenophon's account of the early life of Cyrus is more credible. According to that writer, Astyages king of Media married his daughter Mandane to Cambyses king of Persia, son and successor to Achæmenes. Cyrus was born at his father's court, and was educated with all the care his birth required. When he was about the age of twelve, his grandfather Astyages sent for him to Media, together with his mother Mandane. Some time after, a prince of Assyria having invaded Media, Astyages, with his son Cyaxares and his grandson Cyrus, marched against him. Cyrus distinguished himself in this war, and defeated the Assyrians. Cambyses afterwards recalled him, that he might have him near his own person; and Astyages dying, his son Cyaxares, uncle by his mother's side to Cyrus, succeeded him in the kingdom of Media. Cyrus, at the age of thirty, was, by his father Cambyses, made general of the Persian troops; and sent at the head of 30,000 men to the assistance of his uncle Cyaxares, whom the king of Babylon and his allies, the Cappadocians,

Carians, Phrygians, Cilicians, and Paphlagonians, were preparing to attack. Cyaxares and Cyrus prevented them, by falling upon them and dispersing them. The latter now advanced as far as Babylon, and spread terror throughout the country.

From this expedition he returned to his uncle, towards the frontiers of Armenia and Assyria, and was received by Cyaxares in the tent of the Assyrian king whom he had defeated. After this, Cyrus carried the war into the countries beyond the river Halys, entered Cappadocia, and subdued it entirely. From thence he marched against Crœsus king of Lydia, defeated him in the first battle; then besieged him in Sardis the capital; and after a siege of fourteen days obliged him to surrender. See Crœsus. After this Cyrus, having almost reduced all Asia, repassed the Euphrates, and made war upon the Assyrians. He marched directly to Babylon, took it, and there prepared a palace for his uncle Cyaxares. After these expeditions Cyrus returned to his father and mother in Persia, where they were still living; and some time after visiting Cyaxares in Media, he married his cousin the only daughter and heiress of his uncle's dominions, and returned with her to Babylon. He is now stated to have again engaged in several wars, and subdued all the nations which lie between Syria and the Red Sea. He died at the age of seventy years, after a reign of thirty: but authors differ much concerning the manner of his death. Herodotus, Justin, and Valerius Maximus relate, that he died in a war against the Scythians; that falling into an ambush, which their queen Tomyris had laid for him, she ordered his head to be cut off, and cast into a vessel full of blood, saying, 'Thou hast always thirsted after human blood, now glut thyself with it.' Diodorus the Sicilian states, that he was taken in an engagement and hanged. Ctesias assures us, that he died of a wound which he received in his thigh: but by Xenophon's account he died peaceably in his bed, amidst his friends and servants; and certain it is, that in Alexander's time his monument was shown at Pasagarda in Persia. From all this it is obvious, that we are but imperfectly acquainted with the history of this great prince, the founder of the Persian, and destroyer of the Chaldæan empire.

Cyrus was monarch of all the east; or as he himself speaks (2 Chr. xxxvi. 22, 23; and Ezra i. 1, 2,) 'of all the earth,' when he permitted the Jews to return into their own country; A.M. 3466, and A.A.C. 538. The enemies of the Hebrews, making use of this prince's affection to his own religion, prevailed with him to countermand his orders for the building of the temple at Jerusalem (Ezra iv. 5). The prophets frequently foretold the coming of Cyrus; and Isa. (xliv. 28) mentions him by name 200 years before he was born. Josephus (Antiq. I. II. c. 2) says, that the Jews of Babylon showed this passage of the prophet to Cyrus, which is extremely probable; and that this prince, in the edict which he granted them for their return, acknowledged that he received the empire of the world from the God of Israel; that the same God had described him by name in the writings of the prophets; and had foretold that he should build a temple to him at Jerusalem. Cyrus is expressly styled in scripture, 'the Lord's anointed, and the shepherd of Israel,' (Isaiah xlv. 1, and xliv. 28.); and God says of him (Isa. xlv. 5) 'I girded thee, though thou hast not known me.' Daniel is supposed to allude to this prince. Chap. viii. v. 3—20, under the figure of the ram. The taking of Babylon by Cyrus was clearly foretold by the prophets. See Babylonia and Belshazzar. Archbishop Usher fixes the birth of Cyrus to A. M. 3405; his first year at Babylon to 3466, and his death to 3475.

Cyrus the Younger, son of Darius Nothus, and brother of Artaxerxes. He was sent by his father at the age of sixteen, to assist the Lacedæmonians against Athens. Artaxerxes succeeded to the throne at the death of Nothus; and Cyrus, mad with ambition, attempted to assassinate him. He was discovered, and would have been punished with death, had not his mother Parysatis saved him by her tears and intreaties. This circumstance did not check the ambition of Cyrus; he was appointed over Lydia and the sea coasts, where he secretly fomented rebellion and levied troops under various pretences. At last he took the field with an army of 100,000 barbarians, and 13,000 Greeks, under the command of Clearchus. Artaxerxes met him with 900,000 men near Cunaxa. The battle was long and bloody; and Cyrus might have perhaps obtained the victory, had not his rashness proved his ruin. It is said that the two royal brothers met in person, and their engagement ended in the death of Cyrus, 401 years before the Augustan age; and Artaxerxes, having boasted that his brother had fallen by his hand, put to death two of his subjects for declaring that they had killed him. The Greeks, who were engaged in the expedition, obtained much glory in the battle; and no less by their retreat, which is particularly recorded by Xenophon, one of their leaders. See Xenophon.

CYST, or Cy'stis, *n. s.* Cy'stick, *adj.* Csto'tomy, *n. s.* } Κυστις. A bag containing morbid matter. Contained in a bag. The art or practice of opening or extirpating encysted tumors.

In taking it out, the *cystis* broke, and shewed itself by its matter to be a meliceris. *Wiseman's Surgery.*

There may be a consumption, with a purulent spitting, when the vomica is contained in a *cyst* or bag; upon the breaking of which the patient is commonly suffocated. *Arbuthnot.*

The bile is of two sorts: the *cystick*, or that contained in the gall-bladder, a sort of repository for the gall; or the hepatick, or what flows immediately from the liver. *Id.*

CYTHERA, in ancient geography, an island opposite to Malea a promontory, and to Boæ a town of Laconia; sacred to Venus, with a very ancient temple of that goddess, who was exhibited in armour, as in Cyprus. It is now called Cerigo.

CYTHERÆA, in mythology, the surname of Venus, so called from Cythera, her birth-place, where she had a temple, and on the shores of which she was believed to be wafted by the Zephyrs, surrounded by the Cupids, the Graces

the Tritons, and the Nereides, reclining in a languishing posture in a sea-shell.

CYTINUS, in botany, a genus of the dodecandria order, gynandria class of plants; natural order eleventh, sarmentaceæ: CAL. quadrifid, superior: COR. none; the antheræ are sixteen, and sessile; the fruit an octolocular polyspermous berry. Species one, a Cape shrub.

CYTISUS, tree treefoil, a genus of the decandria order, and diadelphia class of plants; natural order thirty-second, papilionaceæ: CAL. bilabiated, with the upper lip bifid; inferior, tridentate; the legume attenuated at the base. There are eleven species; of which the most remarkable are, 1. C. Austriacus, the Austrian, or Tartarian evergreen cytisus, has a shrubby stem, dividing low into many greenish branches, forming a bushy head three or four feet high, having smooth whitish-green leaves, and bright yellow flowers in close umbellate heads at the ends of the branches, having a cluster of leaves under each head. These flowers appear in May. 2. C. laburnum, or large deciduous cytisus, has a large upright tree-stem, branching into a full spreading head, twenty or thirty feet high, having smooth greenish branches, oblong oval entire leaves, growing by threes on long slender foot-stalks; and from the sides of all the branches numerous yellow flowers collecting into long spikes, hanging loosely downward, and appearing in May.

CYZICENI, CYZICENIANS, the people of Cyzicum, who were noted by the ancients for their timidity and effeminacy. Hence the proverb in Zenodotus and others, tinctura Cyzicenica, applied to persons guilty of an indecency through fear; but stateres Cyziceni, nummi Cyziceni, denote things executed to perfection.

CYZICUM, in ancient geography, an island of the Propontis, on the coast of Mysia; joined to the continent by two bridges, the first of which was built by Alexander the Great.

CYZICUM, or CYZICUS, one of the noblest cities of the Hither Asia; situated in the above island. It was a colony of the Milesians, and is famous for its siege by Mithridates, which was raised by Lucullus. The inhabitants were made free by the Romans, but forfeited their freedom under Tiberius. It was adorned with a citadel and walls; had a port and marble towers; and three magazines, one for arms, another for warlike engines, and a third for corn.

CZAR, *n. s.* } Sclav. *czar*, *tzar*, from Per.
CZARI'NA, *n. s.* } *tajur*, a crown; *taijzar*, a
CZA'RISH, *adj.* } monarch. The emperor of Russia. Czarina is the feminine. Relating to the czar.

There were competitors, the *czar* of Muscovy's son, the duke of Newburg, and the prince of Lorraine.
Browne.

His *czarish* majesty dispatched an express.
The Tatler.

The *czarina* was satisfied with introducing them, for she found it impossible to render them polite.
Goldsmith.

CZASLAU, or TZASLAU, a town of Bohemia, the capital of a circle of the same name, on the Crudinka. It is said to possess the highest spire in Bohemia; and within the beautiful church is interred the famous Zisca. The circle of Czaslau, or Csaslau, is enclosed by Moravia, the circle of Tabor, Caurzim, Bitschow and Chrudim. The soil is productive, but the manufactures are not flourishing. It contains eight towns, thirty-three boroughs, and 829 villages.

CZERNIGOV, or TSCHERNIGOV, a government of European Russia, erected in the year 1781, and lying between those of Mohilev, Smolensko, Orel, Kursk, Pultava, Kiev, and Minsk. The soil is very fertile. It has been augmented beyond its original boundaries by the addition of the government of Novgorod-Sieverskoi; and now contains, according to official returns, 741,850 inhabitants. Czernigov, or Tchernigow, the capital, situated on the right bank of the Desna, is fortified, and is the see of a Greek archbishop. Population 5000. Seventy-five miles north of Kiev, and 344 south-west of Moscow.

CZERNOVICZ, or TSCHERNOWITZ, a town of Austria, the capital of the Bucharvine, or, more properly, of a circle in Galicia. It is situated at the foot of mountains, on the south bank of the Pruth, on the high road from Lemberg to Jassay, 140 miles south-east of the former, and ninety-five north-west of the latter. It was much enlarged and improved in 1771, and contains 5400 inhabitants. Here is a Greek bishop, a custom-house, a criminal court, a provincial and a charity school. The population of the circle, in 1803, was 195,268.

CZIRKNITZ ZEE, a very extraordinary lake of Austria, in Carniola, five miles long and three broad, which annually produces both fish and corn: for, being dry in summer, its bottom is cultivated, and it produces corn, grass, &c.; but about the 29th of September the water rushes in from several subterraneous passages, which, with the rains and streams that fall from the mountains, quickly fill it again for the winter season. These subterraneous passages are probably connected with some gulf, the ebbing or flowing of whose waters depend upon periodical winds or currents.

CZONGRAD, a market town of Hungary, in a county of the same name, situated at the conflux of the Korosch and the Theyss.

CZONGRAD, a county of Hungary, enclosed by the counties of Hewesch, Bekesch, Chonad, Batsch, Pesth, and Little Cumania. It is thirty miles in length and eighteen in breadth.

D.

D. The fourth letter of the Hebrew, Syriac, Greek, Latin, and French languages, is traced by Minsheu in its shape to the Heb ד daleth, signifying, says he, a gate, which the figure of this letter partly resembles. Hence, with a slight alteration, came the Greek Δ, and by rounding two of the angles of the delta, the Roman *D*.

D is generally ranked among the lingual letters, having a middle sound between *t* and *th*, formed by a stronger impulse of the tongue to the roof of the mouth than the former letter. In Latin words the *t* and *d* are often changed for one another, as *at* for *ad*, *set* for *sed*, *haut* for *haud*, &c. And in the formation of words from the Latin, *di* frequently assumes the shape of *gi* or *j*, as journal for diurnal. In English the sound of *d* never varies, nor is it ever mute. D, as a numeral, signifies five hundred; $\overline{D}$, five thousand. See Abbreviations.

DAB, *v. a.* & *n.* } DA'BBLE, *v. a.* & *n.* } DA'BBLER, *n. s.* } DA'B-CHICK. } Gr. δενω, δυπτω; Chald. *dub*; Ger. *dopp-wa*, *dopa*; Sax. dapan, dippan; Scot. *dub*; Belg. *dabben*, *dabbelen*; Fr. *dauber*. All probably, as Minsheu suggests, from the sound of mud, when struck. To dab is to apply something soft or moist, as to a sore; to strike a soft blow. Dab, as a substantive, is a low word for a man expert at something: also a small fish. Mr. Todd thinks it a corruption of adept, adab. To dabble is to move about; to strike, or strike in water or mud; and, by consequence, to smear, daub, or bespatter: metaphorically, to 'meddle without mastery,' as Dr. Johnson well says; and hence a dabbler is 'a superficial meddler.' A dab-chick is a small water-fowl. We first illustrate dab.

A sore should never be wiped by drawing a piece of tow or rag over it, but only by *dabbing* it with fine lint. *Sharp.*

Of flat fish there are rays, flowks, *dabs*, plaice. *Carew.*

One writer excels at—a title-page; another works away at the body of the book; and the third is a *dab* at an index. *Goldsmith's Essays.*

A shadow, like an angel, with bright hair
Dabbled in blood. *Shakspeare. Richard III.*

The little one complained of her legs, that she could neither swim nor *dabble* with them. *L'Estrange.*

Neither will a spirit, that dwells with stars, *dabble* in this impurer mind. *Glanville's Apol.*

I scarified, and *dabbled* the wound with oil of turpentine. *Wiseman's Surgery.*

But when he found the boys at play,
And saw them *dabbling* in their clay,
He stood behind a stall to lurk,
And mark the progress of their work. *Swift.*

He dares not complain of the tooth-ach, lest our *dabblers* in politicks should be ready to swear against him for disaffection. *Id.*

Shakespeare shall be put into your hands, as clean and as fair as it came out of them: though you, I think, have been *dabbling* here and there with the text, I have had more reverence for the writer and the printer, and have left every thing standing. *Atterbury to Pope.*

A *dab-chick* waddles through the copse
On feet and wings, and wades, and flies, and hops. *Pope.*

DA Capo, (Ital. from the head), in music, an Italian term signifying that the beginning of the tune is to be repeated to complete the piece.

DACCA Jelalpore, an important and productive district of Bengal, situated for the greater part between the twenty-third and twenty-fourth degrees of northern latitude. It is bounded on the north by Mymunsingh, on the east by Tipperah, on the south by Backergunge, and on the west by Ranjeshahy and Jessore. It contains a great number of valuable zemindaries or estates, and is every where intersected by the Ganges and Brahmapootra, and their various branches, so that every town of consequence has its river or canal. These rivers, however, frequently occasion considerable damage by their inundations. In this district it is not uncommon to find fields of rice covered with water, six or eight feet deep. Rice is its principal produce, and has been sold, in cheap years, at the rate of 640 lbs. the rupee. Its other productions of consequence are the betel nut, tobacco, and cotton; but it imports large quantities of the last article, which is manufactured in every town and village. Its muslins are very fine and delicate. A deputy of the nabob, called the naib nazim, was the chief of this district during the Mahommedan government: the last person who held this office was Jessarut Khan, who having been ordered in 1763, by the nabob Cossim Aly Khan, to put all the English at Dacca to death, kindly put them on board boats, and sent them under the protection of a guard to Calcutta; in reward for which he was appointed, after the expulsion of his master, to act in his former office on behalf of the British, and, on his decease, a pension was settled on his family, and the eldest son honored with the title of nabob. The principal towns of this district are Dacca, Narraingunge, Sunergong, and Rajanagur. It contains nearly 1,000,000 inhabitants, most of whom are Mahommedans.

Dacca, a considerable city of Bengal, capital of the foregoing district, and for eighty years the capital of Bengal, when it was called Jehangireanagur. It is the residence of a judge, collector, &c., and is situated on the north bank of the Boor Gunga (Old Ganges), which is here very deep and broad, at the distance of about 100 miles from the sea. The best houses are built of brick, but the bazaars are often thatched; and every vacant spot is filled with trees. The French, Dutch, and English East India Companies had factories here at an early period; those of the two former are gone to decay. The ancient citadel at the west end of the town is in ruins, but the palace or Pooshteh is in good repair. In this city are manufactured beautiful muslins, and shell bracelets much worn by the

Hindoo ladies. The hot winds which pervade almost all other parts of India, are, through the abundant irrigation of the neighbourhood, little felt here. The months of September and October are, however, unhealthy. The neighbourhood abounds with game of all sorts, from the tiger to the quail. Provisions and fish are also here very cheap and abundant. Distant by land from Calcutta, 180 miles.

DACE, *n. s.*, called also Dace and Dart, provincially. Sax. dagian, from dag to shine as in Lat. *luciscit*, *luciscus*; a small fish.

Let me live harmlessly, and near the brink
Of Trent or Avon have a dwelling place;
Where I may see my quill or cork down sink
With eager bite of pearch, or bleak, or *dace*. *Walton.*

Dace, in ichthyology, a species of Cyprinus, which see.

DACIA, in ancient geography, a country which Trajan, who reduced it to a province, joined to Moesia by an admirable bridge. This country lies extended between the Danube and the Carpathian Mountains, from the river Tibiscus, quite to the north bend of the Danube; so as to extend thence in a direct line to the mouth of the Danube and to the Euxine; being on the north next the Carpates, terminated by the river Hierasus, now called the Pruth; on the west by the Tibiscus or Teiss; and comprising a part of Upper Hungary, all Transylvania and Walachia, and a part of Moldavia.

Dacia Aureliana, a part of ancient Illyricum, which was divided into the eastern and western; Sirmium being the capital of the latter, and Sardica of the former.

DACIER (Andrew), was born at Castres in Upper Languedoc, 1651, and studied at Saumur under Tannegui le Fevre, then engaged in the instruction of his celebrated daughter, who became Madame Dacier. The duke of Montausier, hearing of his merit, engaged him in an edition of Pompeius Festus, which he published in 1681. His edition of Horace printed at Paris in ten volumes, 12mo., and his other works, raised him to great reputation. He was made a member of the Academy of Inscriptions in 1695. When the history of Louis XIV. by medals was finished, he was chosen to present it to his majesty; who settled upon him a pension of 2000 livres, and appointed him keeper of the books of the king's closet. When that post was united to that of library keeper to the king, he was not only continued in the privileges of his place during life, but the survivance was granted to his wife, a favor of which there had been no former instance. The death, however, of Madame Dacier in 1720, rendered this grant, which was so honorable to her, ineffectual. He died September 18th, 1722, of an ulcer in the throat.

Dacier (Anne), daughter of Tannegui le Fevre, professor of Greek at Saumur in France, went after her father's death to Paris, whither her fame had already reached: she was then preparing an edition of Callimachus, which she published in 1674. Having shown some sheets of it to M. Huet, preceptor to the dauphin, and to several other men of learning, the work was so highly admired, that the duke of Montausier made a proposal to her of publishing several Latin authors for the use of the dauphin. She now, therefore, undertook an edition of Florus, published in 1674. Her reputation being soon after spread over Europe, Christina, queen of Sweden, ordered count Konigsmark to compliment her, and offer her a settlement at Stockholm, in return for which Mademoiselle le Fevre sent the queen a Latin letter, with her edition of Florus. In 1683 she maried M. Dacier; and soon after declared her design of reconciling herself to the church of Rome. Both she and her husband made their public abjuration in 1685. In 1693 she applied herself to the education of her son and daughter; the former, however, died in 1694, and the daughter, after making great attainments, became a nun in the abbey of Longchamp. Her mother has immortalised her memory in the preface to her translation of the Iliad. Madame Dacier was in a very infirm state of health the last two years of her life; and died, after a painful sickness, August 17th, 1720, aged sixty-nine.

DACOLITHUS, in ichthyology, a name given by zoologists to a small fish, supposed to be a species of loache, and called by Ray and some others cobitis barbatulea aculeata. It is a very small fish, seldom exceeding two or at most three inches in length. The head is broader and flatter than the body: its back is of a dusky brown color spotted with black, and its belly yellow. It has two beards on each side of the upper jaw; and on the coverings of the gills, on each side, two prickles, or a double-pointed sharp hook, whereby it moves itself among the stones. It delights in shallow waters, with a stony bottom, and spawns in May and June.

DAC'TYLE, *n. s.* } Gr. δακτυλος, a finger,
Dac'tilet, } (from δεικω to point) be-
Dactyl'ic, *adj.* } cause composed of three parts, the first longer than either of the others; Minsheu. A poetical foot, consisting of one long syllable and two short, like the joints of a finger; as cāndĭdŭs. Bishop Hall uses dactilet as a diminutive.

The nimble *dactils*, striving to outgo
The drawling spondees, pacing it below:
The lingering spondees, labouring to delay
The breathlesse *dactils*, with a sudden stay.
Whoever saw a colt, wanton and wilde,
Yoked with a slow-foote oxe on fallow field,
Can right areed how handsomly besets
Dull Spondees with the English *dactilets*.
Bp. Hall. Satires, i. 6.

A *dactyl* has the first syllable accented, and the two latter unaccented: as, labourer, possible.
Murray. On Prosody.

The *dactylic* measure being very uncommon, we shall give only one example of one species of it.

From the low pleasures of this fallen nature,
Rise we to higher, &c.
Id.

Dactyle. The dactyle is said to have been the invention of Dionysius or Bacchus, who delivered oracles in this measure at Delphos, before Apollo. The Greeks call it πολιτικος. The dactyl and spondee are the most considerable of the poetical feet; as being the measures used in heroic verse, by Homer, Virgil, &c. These two are of equal time, but not equal motion.

DACTYLETHRA, or DACTYLITHRA, digitalis, among the ancient physicians, a medicine used to excite vomiting. It was a sort of topical application, and is described at large by Oribasius.

DACTYLIC VERSES are hexameter verses, ending in a dactyle instead of a spondee; as spondaic verses are those which have a spondee in the fifth foot instead of a dactyle. An instance of a dactylic verse occurs in Virgil: Æn. vi. 33.

Bis patriæ cecidere manus: quin protinus omnia.

DACTYLI IDÆI, q. d. the Fingers of Mount Ida, in pagan mythology, personages very differently described by ancient authors. The Cretans paid divine worship to them, as to those who had nursed and brought up the god Jupiter; whence it appears, that they were the same as the Corybantes and Curetes. Nevertheless Strabo makes them different; and says, that the tradition in Phrygia was, that the 'Curetes and Corybantes were descended from the Dactyli Idœi: that there were originally 100 men in the island, who were called Dactyli Idæi; from whom sprang nine Curetes, and each of these nine produced ten men, as many as the fingers of a man's two hands; and that this gave the name to the ancestors of the Dactyli Idæi.' He relates another opinion, which is, that there were but five Dactyli Idæi; who, according to Sophocles, were the inventors of iron: that these five brothers had five sisters, and that from this number they took the name of fingers of Mount Ida, because they were in number ten; and that they worked at the foot of this mountain. Diodorus Siculus says, 'the first inhabitants of the island of Crete were the Dactyli Idæi, who had their residence on mount Ida: that some said they were 100; others only five, in numbers equal to the fingers of a man's hand, whence they had the name of Dactyli: that they were magicians, and addicted to mystical ceremonies: that Orpheus was their disciple, and carried their mysteries into Greece: that the Dactyli invented the use of iron and fire, and that they had been recompensed with divine honors.' Diomedes the grammarian says, the Dactyli Idæi were priests of the goddess Cybele: called Idæi, because that goddess was chiefly worshipped on Mount Ida in Phrygia; and Dactyli, because that, to prevent Saturn from hearing the cries of infant Jupiter, whom Cybele had committed to their custody, they used to sing certain verses of their own invention, in the Dactylic measure. Strabo gives us the names of four of the Dactyli Idæi: viz. Salaminus, Damnanæus, Hercules, and Acmon. See CORYBANTES, CRETE, and CURETES.

DACTYLIOMANCY, or DACTYLIOMANTIA from *δακτυλιος*, a ring, and *μαντεια*, divination, a sort of divination performed by means of a ring. It consisted in holding a ring, suspended by a fine thread, over a round table, on the edge of which were made divers marks with the letters of the alphabet. The ring in shaking, or vibrating over the table, stopped over certain of the letters, which, being joined together, composed the answer required.

DACTYLIS, in botany, cock's foot grass; a genus of the digynia order, and triandria class of plants; natural order fourth, gramina: CAL. bivalved and compressed, with the one valve longer than the other, carinated, or having the rachis prominent and sharp. There are two species, both natives of Britain; viz. 1. D. cynosuroides, the smooth cock's foot grass, which grows in marshy places; and 2. D. glomeratus, the rough cock's foot grass, which is common in meadows and pasture grounds. It is eaten by horses, sheep, and goats; but refused by cows.

DACTYLONOMIA, or DACTYLONOMY, from *δακτυλος*, and *νομος*, a rule, the art of numbering by the fingers. The rule is this; the left thumb is reckoned one; the index or fore finger two: and so on to the right thumb, which stands for the cypher.

DACTYLUS, in zoology, a name given by Pliny to the pholas. In Toulon harbour, and the road, are found solid hard stones, perfectly entire; containing, in different cells, secluded from all communication with the air, several living shell-fish, of an exquisite taste, called dactyli, i. e. dates: to come at these fish the stones are broken with mauls. Along the coast of Ancona, in the Adriatic, are stones usually weighing about fifty pounds, and sometimes even more, the outside rugged and easily broken, but the inside so hard as to require a strong arm and an iron maul to break them; within them, and in separate niches, are found small shell-fish, quite alive and very palatable, called solenes and cappe laughe. These facts are attested by Gassendi, Blondel, Mayol, the learned bishop of Sulturara, and more particularly by Aldrovandi, a physician of Bologna. The two latter speak of it as a common fact, which they themselves saw.

DADUCHI, Gr. *δαδωχες*, torch-bearers, in antiquity, priests of Ceres. The goddess having lost her daughter Proserpine, say mythologists, began to make search for her at the beginning of the night. In order to do this in the dark, she lighted a torch, and thus set forth on her travels throughout the world: for which reason she is represented with a lighted torch in her hand. In commemoration of this pretended exploit, it became a custom for the priests, at the feasts and sacrifices of this goddess, to run about in the temple with torches after this manner:—one of them took a lighted torch from off the altar, and, holding it with his hand, ran with it to a certain part of the temple, where he gave it to another, saying to him, tibi trado: the second ran after the like manner to another part of the temple, and gave it to the third, and he to another and so on

DAD, *n. s.* } Heb. דוד, *dodh*, beloved; Gr.
DAD'DY. } *ατται*; Hind. *ata*; Lat. *tata*; Goth. *atta*; Fr. *papa*. One among those familiar words with which, in all languages, children first salute their father; and which are universally compounds of *a* and *t* or *d*; or *a* and *b* or *p*.

I was never so bethumpt with words,
Since first I called my brother's father *dad*.
Shakspeare.

His loving mother left him to my care,
Fine child, as like his *dad* as he could stare.
Gay.

DADE, *v. a.* Dut. *douden*. To hold up by a leading string.

The little children when they learn to go,
By painful mothers *daded* to and fro. *Drayton.*

DÆD'AL, *adj.* Lat. *dædalus;* Gr. δαιδαλλω; to variegate skillfully, first applied to needlework. Why Dr. Johnson warns us against using the word with this meaning is difficult to divine. See Ainsworth, and the fine example from Spenser. Various; variegated. Skilful.

But living art may not least part expresse,
Nor life resembling pencill it can paynt,
All were Zeuxis or Praxiteles;
His *Dædale* hand would faile and greatly faynt,
And her perfections with his error taynt.
Spenser. Faerie Queene.

Nor hath
The *dædal* hand of nature only poured
Her gifts of outward grace. *Philips.*

DÆDALA, two festivals in Bœotia; one of them observed in Alalcomenos by the Platæans in a large grove, where they exposed in the open air pieces of boiled flesh, and carefully observed whither the crows that came to prey upon them directed their flight. All the trees upon which any of these birds alighted were immediately cut down, and with them statues were made, called Dædala, in honor of Dædalus. The other festival was of a more solemn kind. It was celebrated every sixty years by all the cities of Bœotia, as a compensation for the intermission of the smaller festivals, for that number of years, during the exile of the Platæans. Fourteen of the statues called Dædala were distributed by lot among the Platæans, Lebadæans, Coroneans, Orchomenians, Thespians, Thebans, Tanagræans, and Chæroneans, because they had effected a reconciliation among the Platæans, and caused them to be recalled from exile about the time that Thebes was restored by Cassander, the son of Antipater. During this festival a woman, in the habit of a bride-maid, accompanied a statue which was dressed in female garments, on the banks of the Eurotas. This procession was attended to the top of Mount Cithæron by many of the Bœotians, who had places assigned them by lot. Here an altar of square pieces of wood cemented together like stones was erected, and upon it were thrown large quantities of combustible materials. Afterwards a bull was sacrificed to Jupiter, and an ox or heifer to Juno, by every one of the cities of Bœotia, and by the most opulent that attended. The poorest citizens offered small cattle; and all these oblations, together with Dædala, were thrown into the common heap and set on fire, and totally reduced to ashes. They originated in this fable:—When Juno, after a quarrel with Jupiter, had retired to Eubœa, and refused to return to his bed, the god, anxious for her return, went to consult Cithæron king of Platæa, to find some effectual measure to break her obstinacy. Cithæron advised him to dress a statue in woman's apparel, and carry it in a chariot, and publicly to report that it was Platæa the daughter of Asopus, whom he was going to marry. The advice was followed; and Juno, informed of her husband's future marriage, repaired in haste to meet the chariot, and was easily united to him when she discovered the artful measures he made use of to effect a reconciliation.

DÆDALUS, in fabulous history, the son of Eupalamus, descended from Erectheus king of Athens. He was the most ingenious artist of his age; and to him we are said to be indebted for the invention of the wedge, with many other mechanical instruments; as well as the sails of ships. He made statues, we are told, which moved of themselves, and seemed to be endowed with life. After the murder of Talus, he, with his son Icarus, fled from Athens to Crete, where Minos gave him a cordial reception. Dædalus made a famous labyrinth for Minos, and assisted Pasiphae the queen to gratify her unnatural passion for a bull. For this action Dædalus incurred the displeasure of Minos, who ordered him to be confined in the labyrinth which he had constructed. Here he made himself wings with feathers and wax, and carefully fitted them to his body and that of his son, who was the companion of his confinement. They took their flight in the air from Crete; but the heat of the sun melted the wax on the wings of Icarus, whose flight was too high, and he fell into that part of the ocean, which from him has been called the Icarian Sea. The father, by a proper management of his wings, alighted at Cumæ, where he built a temple to Apollo, and thence directed his course to Sicily, where he was kindly received by Cocalus, who reigned over part of the country. He left many monuments of his ingenuity in Sicily, which still existed in the age of Diodorus Siculus. He was despatched by Cocalus, who was afraid of the power of Minos, who had declared war against him because he had given an asylum to Dædalus. The flight of Dædalus from Crete, with wings, is explained by observing that he was the inventor of sails, which in his age might pass at a distance for wings. He lived about A. A. C. 1400.

DÆMON, δαιμων, a name given by the ancients to certain spirits or genii, which they say appeared to men both to do them service and to injure them. The word is derived, according to Plato, in his Cratylus, from δαημων, knowing or intelligent; but according to others from δαιομαι, to distribute. They held a middle rank between the celestial gods and men, and carried on all intercourse between them. It was the opinion of many that the celestial divinities did not themselves interpose in human affairs, but committed the entire administration of the government of this lower world to these subaltern deities. Hence they became the objects of worship. 'If idols are nothing,' says Celsus (Origen cont. Cels. lib. viii. p. 393), 'what harm can there be to join in the public festivals? If they are dæmons, then it is certain that they are gods, in whom we are to confide, and to whom we should offer sacrifices and prayers, to render them propitious.' Plutarch teaches, Vit. Romul. p. 36, ed. Paris, 'that according to a divine nature and justice, the souls of virtuous men are advanced to the rank of dæmons; and that from dæmons, if they are properly purified, they are exalted into gods, not by any political institution, but according to right reason.' He

says in another place, de Is. et Osir. p. 361, 'that Isis and Osiris were, for their virtue, changed from good dæmons into gods, as were Hercules and Bacchus afterwards, receiving the united honors both of gods and dæmons.' The word dæmon is used indifferently in a good and in a bad sense. In the former sense it is very common among the ancient heathens. Pythagoras held that dæmons sent diseases to men and cattle. Diogen. Laert. Vit. Pythag. Zaleucus, in his preface to his Laws, supposes that an evil dæmon might be present with a man to influence him to justice. The dæmons of Empedocles were evil spirits, and exiles from heaven. And Plutarch in his life of Dion says, 'it was the opinion of the ancients that evil and mischievous dæmons, out of envy and hatred to good men, oppose whatever they do.' Scarce did any opinion more generally prevail in ancient times than this, viz. that as the departed souls of good men became good dæmons, so the departed souls of bad men became evil dæmons. Besides the two forementioned kinds of dæmons, the fathers, as well as the ancient philosophers, held a third, viz. such as sprang from the congress of superior beings with the daughters of men. In the theology of the fathers these were the worst kind of dæmons. Different orders of dæmons had different stations and employments assigned them by the ancients. Good dæmons were considered as the authors of good to mankind; evil dæmons brought innumerable evils both upon men and beasts. Amongst evil dæmons there was a great distinction with respect to the offices assigned them; some compelled men to wickedness, others stimulated them to madness. See DÆMONIAC. Much has been said concerning the dæmon of Socrates; who declared to the world that a friendly spirit, whom he called his dæmon, directed him how to act on every important occasion in his life, and restrained him from imprudence of conduct. See SOCRATES.

We have seen above, not only the meaning of the word dæmon, but how the ancients worshipped dæmons. They were of various orders, and, according to the situation over which they presided, had different names. Hence the Greek and Roman poets talk of satyrs, dryads, nymphs, fauns, &c. &c. See MYTHOLOGY. These different orders of intelligences, which, though worshipped as gods or demigods, were yet believed to partake of human passions and appetites, led the way to the deification of departed heroes, and other eminent benefactors of the human race; and from this latter probably arose the belief of natural and tutelar gods, as well as the practice of worshipping these gods through the medium of statues cut into a human figure. Dæmons, however, were not more zealously worshipped among the heathens, than they have been among Christians. Bishop Newton, after establishing the meaning of Paul's prophetic words, 1 Tim. iv. 1, above referred to, as corresponding exactly to the heathen dæmon worship, says, 'It appears then that the doctrines of dæmons, which prevailed so long in the heathen world, should be revived and established in the Christian church; and is not the worship of saints and angels now in all respects the same that the worship of dæmons was in former times? The name only is different, the thing is identically the same.'

DÆMONIAC, a human being, whose volition and other mental faculties are overpowered and restrained, and his body possessed and actuated, by some created spiritual being of superior power. Such seems to be the determinate sense of the word; but it is disputed whether any of mankind ever were in this unfortunate condition.

It is the opinion of some, that neither good nor evil spirits are known to exert such authority at present over the human race: but in the ancient heathen world, and among the Jews, particularly in the days of our Saviour, evil spirits, at least, are thought by many to have possessed more influence than they do now. The Greeks and Romans imagined that their deities, to reveal future events, frequently entered into the prophet or prophetess who was consulted, overpowered their faculties, and uttered responses with their organs of speech. Apollo was believed to enter into the Pythoness, and to dictate the prophetic answers received by those who consulted her. Other oracles, besides that of Delphi, were supposed to unfold futurity by the same machinery. And in various other cases, either malignant dæmons or benevolent deities were thought to enter into, and to actuate, human beings. The Lymphatici, the Cerriti, the Larvati, of the Romans, were all of this description; and the Greeks, by the use of the word *δαιμονιζομενοι*, show that they referred to this cause the origin of madness. Among the ancient heathens, therefore, it appears to have been a generally received opinion, that superior beings entered occasionally into men, overpowered the faculties of their minds, and actuated their bodily organs. They might imagine that this happened in instances in which the effects were owing to the operation of different causes; but an opinion so generally prevalent had surely some plausible foundation. The Jews, too, both from the sacred writings, and Josephus, appear to have believed in dæmoniacal possession. The case of Saul may be recollected as one among many in which superior created beings were believed by the Jews to exert in this manner their influence over human life. The general tenor of their history and language, and their doctrines concerning good and evil spirits, prove the opinion of dæmoniacal possession to have been well known and generally received among them.

We shall here subjoin the chief popular arguments on each side of this interesting subject, and add a few remarks. Those who are unwilling to allow that angels or devils have ever intermeddled with the concerns of human life, urge a number of specious arguments. The Greeks and Romans of old, say they, did believe in the reality of dæmoniacal possession. They supposed that spiritual beings did at times enter into the sons or daughters of men, and distinguish themselves in that situation by capricious freaks deeds of wanton mischief, or prophetic enunciations. But, in the instances in which they supposed this to happen, it is evident that no such thing took place. Their accounts of the

state and conduct of those persons whom they believed to be possessed in this supernatural manner, show plainly that what they ascribed to the influence of dæmons were merely the effects of natural diseases. Whatever they relate concerning the larvati, the cerriti, and the lymphatici, shows that these were merely people disordered in mind, in the same unfortunate situation with those madmen and idiots, and melancholy persons, whom we have among ourselves. Festus describes the larvati as being furiosi et mentemoti. Plato, in his Timæus, says, *ουδεις γαρ εννους εφαπτεται μαντικης ενθεους, αληθους.* Lucian describes dæmoniacs as lunatic, and as staring with their eyes, foaming at the mouth, and being speechless. It appears still more evidently, that all the persons spoken of as possessed with devils in the New Testament, were either mad or epileptic, and precisely in the same condition with the madmen and epileptics of modern times. The Jews, among other reproaches which they threw out against our Saviour, said, He hath a devil, and is mad: why hear ye him? The expressions, he hath a devil, and is mad, were certainly used on this occasion as synonymous. With all their virulence they would not surely ascribe to him at once two things that were inconsistent and contradictory. Those who thought more favorably of the character of Jesus, asserted concerning his discourses, in reply to his adversaries, These are not the words of him that hath a dæmon; meaning, no doubt, that he spoke in a more rational manner than a madman could be expected to speak. The Jews appear to have ascribed to the influence of dæmons, not only that species of madness in which the patient is raving and furious, but also melancholy madness. Of John, who secluded himself from intercourse with the world, and was distinguished for abstinence and acts of mortification, they said, He hath a dæmon. The youth, whose father applied to Jesus to free him from an evil spirit, describing his unhappy condition in these words, Have mercy on my son for he is lunatic, and sore vexed with a dæmon; for ofttimes he falleth into the fire, and oft into the water, was plainly epileptic. Every thing, indeed, that is related in the New Testament concerning dæmoniacs, proves that they were people affected with such natural diseases as are far from being uncommon among mankind in the present age. When the symptoms of disorders cured by our Saviour and his apostles, as cases of dæmoniacal possession, correspond so exactly with those of diseases well known as natural in the present age, it would be absurd to impute them to a supernatural cause. It is much more consistent with common sense and sound philosophy, to suppose, that our Saviour and his apostles wisely, and with that condescension to the weakness and prejudices of those with whom they conversed, which so eminently distinguished the character of the author of our holy religion, and must always be a prominent feature in the character of the true Christian, adopted the vulgar language in speaking of those unfortunate persons who were groundlessly imagined to be possessed with dæmons, though they well knew the notions which had given rise to such modes of expression to be ill founded, than to imagine that diseases which arise at present from natural causes, were produced in days of old by the intervention of dæmons, or that evil spirits still continue to enter into mankind in all cases of madness, melancholy, or epilepsy. Besides, it is by no means a sufficient reason for receiving any doctrine as true, that it has been generally received through the world. Error, like an epidemical disease, is communicated from one to another. In certain circumstances, too, the influence of imagination predominates, and restrains the exertions of reason. Many false opinions have extended their influence through a very wide circle, and maintained it long. On every such occasion as the present, therefore, it becomes us to inquire, not so much how generally any opinion has been received, or how long it has prevailed, as from what cause it has originated, and on what evidence it rests. When we contemplate the frame of nature, we behold a grand and beautiful simplicity prevailing through the whole. Notwithstanding its immense extent, and though it contains such numberless diversities of being, yet the simplest machine constructed by human art does not display greater simplicity, or a happier connexion of parts. We may therefore infer, by analogy, from what is observable of the order of nature in general to the present case, that to permit evil spirits to intermeddle with the concerns of human life, would be to break through that order which the Deity appears to have established through his works; it would be to introduce a degree of confusion unworthy of the wisdom of Divine Providence.

In opposition to these arguments the following are urged by the Dæmonianists. In the days of our Saviour, it would appear that dæmoniacal possession was very frequent among the Jews and the neighbouring nations. Many were the evil spirits whom Jesus is related in the gospels to have ejected from patients that were brought unto him as possessed and tormented by those malevolent dæmons. His apostles, too, and the first Christians, who were most active and successful in the propagation of Christianity, appear to have often exerted the miraculous powers with which they were endowed on similar occasions. The dæmons displayed a degree of knowledge and malevolence which sufficiently distinguished them from human beings: and the language in which the dæmoniacs are mentioned, and the actions and sentiments ascribed to them in the New Testament, show that our Saviour and his apostles did not consider the idea of dæmoniacal possession as being merely a vulgar error concerning the origin of a disease or diseases produced by natural causes. The more enlightened cannot always avoid the use of metaphorical modes of expression; which, though founded upon error, yet have been so established in language by the influence of custom, that they cannot be suddenly dismissed. But in descriptions of characters, in the narration of facts, and in the laying down of systems of doctrine, we require different rules to be observed. Should any person, in compliance with popular opinions, talk in serious language of the existence, dispositions, declarations, and actions of a race of

beings whom he knew to be absolutely fabulous, we surely could not praise him for integrity: we must suppose him to be either exulting in irony over the weak credulity of those around him, or taking advantage of their weakness, with the dishonesty and the selfish views of an impostor. And if he himself should pretend to any connexion with this imaginary system of beings; and should claim, in consequence of his connexion with them, particular honors from his contemporaries; whatever might be the dignity of his character in all other respects, nobody could hesitate to brand him as an impostor. In this light must we regard the conduct of our Saviour and his apostles, if the idea of dæmoniacal possession were to be considered merely as a vulgar error. They talked and acted as if they believed that evil spirits had actually entered into those who were brought to them as possessed with devils, and as if those spirits had been actually expelled by their authority out of the unhappy persons whom they had possessed. They demanded, too, to have their professions and declarations believed, in consequence of their performing such mighty works, and having thus triumphed over the powers of hell. The reality of dæmoniacal possession stands upon the same evidence with the gospel system in general. Nor is there any thing unreasonable in this doctrine. It does not appear to contradict those ideas, which the general appearances of nature and the series of events suggest, concerning the benevolence and wisdom of the Deity, by which he regulates the affairs of the universe. We often fancy ourselves able to comprehend things to which our understanding is wholly inadequate: we persuade ourselves at times that the whole extent of the works of the Deity must be well known to us, and that his designs must always be such as we can fathom. We are then ready whenever any difficulty arises to us, in considering the conduct of Providence, to model things according to our own ideas; to deny that the Deity can possibly be the author of things which we cannot reconcile; and to assert that he must act on every occasion in a manner consistent with our narrow views. This is the pride of reason; and it seems to have suggested the strongest objections that have been at any time urged against the reality of dæmoniacal possession. But the Deity may surely connect one order of his creatures with another. We perceive mutual relations and a beautiful connexion to prevail through all that part of nature which falls within the sphere of our observation. The inferior animals are connected with mankind, and subjected to their authority, not only in instances in which it is exerted for their advantage, but even where it is tyrannically abused to their destruction. Among the evils to which mankind have been subjected, why might not their being liable to dæmoniacal possession be one? While the Supreme Being retains the sovereignty of the universe, he may employ whatever agents he thinks proper in the execution of his purposes: he may either commission an angel or let loose a devil, as well as bend the human will, or communicate any particular impulse to matter. All that revelation makes known, all that human reason can conjecture, concerning the existence of various orders of spiritual beings, good and bad, is perfectly consistent with, and even favorable to, the doctrine of dæmoniacal possession. It is mentioned in the New Testament in such language, and such narratives are related concerning it, that the gospels cannot well be regarded in any other light than as pieces of imposture, and Jesus Christ must be considered as a man who took advantage of the weakness and ignorance of his contemporaries, if this doctrine be nothing but a vulgar error. It teaches nothing inconsistent with the general conduct of providence. In short, it is not the caution of philosophy, but the pride of reason, that suggests objections against this doctrine.

Such are the leading arguments generally urged on this subject; the reader must of course judge for himself between them; but we cannot dismiss the article without a few additional remarks. It is argued by those who deny the influence of dæmons or evil spirits, that to permit such an influence on the concerns of human life, would be to break through that order which the Deity appears to have established throughout his works, and to introduce a degree of confusion unworthy of the Divine Providence. This, to say the least of it, is a most gratuitous assertion. For surely those who make it are well aware of the existence of much real evil in the affairs of human life, and yet the Divine government moves on with a regularity and an order that cannot fail to excite the admiration of every well-disposed mind. Now to meet the objection in all its bearings, we would ask those who make it, whether they think that all the evil which they see existing around them, or any part of it, is effected without the medium of any kind of agency? This, we conceive, no rational man would venture to maintain. The question then is simply this,—of what nature is this agency? To this question, as the point at issue rests solely on the authority of Divine Revelation, we reply,—it is of a purely spiritual nature, and has its origin in the spiritual world. The existence of such agency, both of a good and of an evil nature, is as clearly taught as any fact made known by the sacred writings. It is by means of it that the various affections of the human mind are produced; nor would any difficulty be experienced by us on this point were we constantly to keep in mind that man, in his present state, is intimately connected with both worlds; with the invisible by means of his spirit, and with the visible or material world by means of his body. The cases of dæmoniacal possession that occurred during the time of Christ's sojourning on earth were exactly what, from the information of Scripture, might have been expected to take place. The Eternal (according to the opinion of a vast body of Christians) assumed the human nature, that in it He might, in the sight of mankind, effect their deliverance from the infernal influence which threatened their destruction. This was accomplished by His passing through a series of the most unparalleled trials, which terminated in a conflict unutterably awful. The numerous cases of dæmoniacal possession that are introduced to

our notice in the sacred history appear to have been so many specimens of the ascendency which this influence had gained, and the certainty of its being removed; for we find, in every case, that the evil spirit was cast out: and certainly it was no obscure allusion that Jesus made to this when in the immediate prospect of the last great conflict with the invisible powers of darkness, and in reference to the grand effect of his triumph over them in the spiritual state, he said, 'Now is the judgment of this world: now shall the prince of this world be cast out.' Does not this very declaration seem to allude to the circumstance of such possessions being less frequent since that time? We say *less* frequent, because we think there can be no doubt but that *some* instances of extraordinary evil agency are, for wise purposes, still permitted to appear in the world; although certainly, in no case, to the same extent as before our Lord's subjugation of such agency. We do not deny that superstition has much augmented the number of these; yet it would be easy to specify some cases that have powerful claims on the most rational and enlightened belief.

DÆMONIACS, in church history, a sect whose distinguishing tenet was said to be, that the devils shall be saved at the end of the world.

DAFF, *v. a.* & *n. s.* } Goth. *doef*; Fr. *dofwa*,
DAFT, *n s.* } to stupify. But Dr. Johnson thinks our word daff, or daft, is a corruption of to do aft, or throw aside, and the examples from Shakspeare seem to justify him. To cast off; to daunt. A person treated contemptuously; a dolt, or coward.

When this jape is tald another day,
I shall be halden a *daffe* or a cokenay,
I wol arise and auntre it by my fay:
Unhardy is unsely, thus men say.
Chaucer. Cant. Tales.

The nimble-footed mad-cap prince of Wales,
And his comrades, that *daft* the world aside,
Bid it pass. *Shakspeare. Henry IV.*

I would she had bestowed this dotage on me: I would have *daft* all other respects, and made her half myself. *Id.*

DA'FFODIL, *n s.* }
DAFFODI'LLY. } Supposed by Skinner to be corrupted from asphodelus. A common flower.
DAFFODOWNDI'LLY. }

Strew me the green round with *daffodowndillies*,
And cowslips, and kingcups, and loved lilies.
Spenser.

Bid amaranthus all his beauty shed,
And *daffodillies* fill their cups with tears,
To strew the laureat herse where Lycid lies.
Milton.

The daughters of the flood have searched the mead
For violets pale, and cropped the poppy's head:
The short narcissus, and fair *daffodil*,
Pansies to please the sight, and cassia sweet to smell.
Dryden.

DAFT. See DAFF.

DAG, or DAGGE, *n. s.* Because the Dacians, says Minsheu, first used it. A pistol or hand gun. Dr. Meyrick says, 'the name is peculiar to Great Britain.'

D'ye call this gun a *dag?*
Beaumont and Fletcher.

DAG, or
DAGGE, *n. s.*
DAGGER.
DAGGER-DRAWING. } Old Fr. *dagge*; Ital. *dagga*; Span. *daga* Wel. and Arm. *dagr*, from Heb. דקר, to pierce; Minsheu. A cutting and stabbing weapon, principally the latter.

Upon his arme he bare a gaie bracer,
And by his side a swerd and a bokeler,
And on that other side a gaie *daggere*,
Harneised wel, and sharpe as point of spere.
Chaucer. Prol. to Cant. Tales.

She ran to her son's *dagger*, and struck herself a mortal wound. *Sidney.*

This sword a *dagger* had his page,
And was but little for his age,
And therefore waited on him so
As dwarfs upon knights-errant do. *Hudibras.*

They always are at *daggersdrawing*,
And one another clapperclawing. *Id.*

I have heard of a quarrel in a tavern, where all were at *daggersdrawing*, till one desired to know the subject of the quarrel. *Swift.*

He strikes himself with his *dagger*, but being interrupted by one of his friends, he stabs him, and breaks the *dagger* on one his ribs. *Addison.*

The Roman, when his burning heart
Was slaked with blood of Rome,
Threw down the *dagger*, dared depart
In savage grandeur home, *Byron.*

DAG, *v. a.* & *n. s.* }
DAG'GLE, *v. a.* &*n.* } Sax. ᵹaᵹ, to sprinkle, and ᵹaᵹ, dew. To bemire; let fall into water; besprinkle. Dagtailed, or daggletailed, is bemired, bespattered, or muddy.
DAG'TAILED.
DAG'GLETAIL. }

Would it not vexe thee, where thy syres did keepe,
To see the dunged foldes of *dag-tayld* sheepe?
And ruined house, where holy things were said,
Whose free-stone wals, the thatched roof: upbraid?
Bp. Hall.

Now in contiguous drops the flood comes down,
Threatening with deluge this devoted town:
To shops in crowds the *daggled* females fly,
Pretend to cheapen goods, but nothing buy. *Swift.*

The gentlemen of wit and pleasure are apt to be choaked at the sight of so many *daggletailed* parsons, that happen to fall in their way. *Id.*

Nor like a puppy *daggled* through the town,
To fetch and carry sing-song up and down.
Pope.

DAGELET, an island on the coast of Corea, about three leagues in circumference, covered with fine trees, and surrounded with steep rocks, except a few sandy creeks, which form convenient landing places. It was discovered by La Peyrouse in 1787, who found some boats of a Chinese construction upon the stocks. The men employed upon them, were supposed to be Corean carpenters, but as the ships approached they fled to the woods. The French navigator supposed that the island was uninhabited; except during summer by people from Corea, for building boats. Long. 131° 22′ E., lat. 37° 25′ N.

DAGHESTAN, a country of Asia, west of the Caspian Sea, between the efflux of the Koisin and the Rubas. It is about 134 miles in length, by between thirty and forty in breadth. It is almost wholly mountainous; but the soil is productive, and fine crops of grain are raised The

Russians claim the sovereignty of Daghestan, which is divided into four districts; but their authority is not universally acknowledged. Many of the inhabitants subsist by plunder; but it has recently been the scene of contest between the Persians and Russians. The chief towns are Tarki, Derbend, Baschli, and Ottermisch.

DAGO, or DAGHO, an island in the Baltic Sea, on the coast of Livonia, between the gulf of Finland and Riga. It is of a triangular figure, and may be about twenty miles in circumference. It has nothing considerable but two castles called Daggerwort and Paden. Long. 22° 50′ E., lat. 58° 44′ N.

DAGOE, DAGHO, or DAGEN, an island of the Baltic, at the entrance of the gulf of Finland, near the coast of Esthonia, and separated from the island of Oesel by a narrow channel. It is about forty miles long, and from twenty-six to thirty-six broad, and is well peopled. At Dagerort there is a lighthouse.

DAGON, the idol of Ashdod or Azotus. He is commonly represented as a monster, half man and half fish; whence most learned men derive the name from the Hebrew *dag*, which signifies a fish. Those who make him to have been the inventor of bread corn, derive his name from the Hebrew, דגון, Dagon, signifying corn; whence Philo-Biblius calls him Ζευς Αραοτριος, Jupiter Aratrius. This deity continued to have a temple at Ashdod to the time of the Maccabees: for the author of the first book of Maccabees tells us, that 'Jonathan, one of the Maccabees, having beaten the army of Apollonius, Demetrius's general, they fled to Azotus, and entered into Bethdagon (the temple of their idol); but Jonathan set fire to Azotus, and burnt the temple of Dagon and all those who were fled into it.' Dagon, according to some, was the same with Jupiter, according to others Saturn or Venus; but according to most Neptune.

DAHALAK, DALAKA, or DALACCA, an island in the Red Sea, near the coast of Abyssinia, about twenty-five miles in length, and twelve in breadth, anciently celebrated for its pearl fishery. It is low and flat, with a sandy soil, and in summer destitute of every kind of herbage, except a small quantity of bent grass, which is barely sufficient to feed a few antelopes and goats. From the end of March to the beginning of October, they have no rain in Dahalak; but in the intermediate months they have heavy showers, when the water is collected into artificial cisterns, to supply the inhabitants during the ensuing summer. Of these cisterns, which are supposed to be either the work of the Persians or of the first Ptolemies, upwards of 300 remained at a recent period, cut out of the solid rock. Its principal port is Dahalece-el-Kebar, but it will only admit small vessels; and its trade is with Masuah. It was formerly much more populous than at present. This as well as the neighbouring islands is dependent upon Masuah; and the governor is furnished monthly with a goat from each of the twelve villages; besides which every vessel putting in here for Masuah, pays him a pound of coffee, and every one from Arabia, a dollar. From these his revenue chiefly arises. Long. 39° 0′ E., lat. 15° 40′ N.

DAHL, or DAL, a large river of Sweden, which runs through the provinces of Dalecarlia and Gestricia, and falls into the gulf of Bothnia, four leagues E. S. E. of Gefle. Near Elfkarleby it forms a celebrated cataract, scarcely inferior to the fall of the Rhine at Lauffen.

DAHLIA, in botany, a genus of plants belonging to the syngenesia class and polygamia order, thus named by Cavanilles in honor of Dr. Andrew Dahl, a Swedish botanist. The stems die every winter, but the root is perennial and tuberous. The known species are but four. 1. D. pinnata, figured by Cavanilles, and in Andrew's Botanical Repository: it has bipennate leaves of a deep purple color. 2. D. rosea, a rose-colored variety figured by Cavanilles in his Icones. 3. D. coccinea, a scarlet variety; and, 4. D. crocata, a saffron-colored species. These beautiful plants are now becoming so general in British gardens, that a lengthened description would be superfluous: it is sufficient to say, that they elevate the stem like the holly-hock, and bear fine showy axillary and terminal flowers late in the autumn.

DAHOMEY, or DAUMA, a kingdom of Africa, on the coast of Guinea, situated about sixty or seventy miles from the Atlantic, to the east of Ashantee. This kingdom, which is correctly placed in various old maps, particularly that of Mercator, who names its ancient capital Dauina, was erased from the maps of Africa in 1700, and the existence of the nation of Dauma denied; but it emerged from obscurity in 1727, by the fame of its conquests of the maritime states of Whidah and Ardra. Dahomey, as known at present, is supposed to reach from the sea coast 150 miles in land, but no European has yet penetrated to that distance from the coast. The soil is a deep rich clay, of a reddish color, with a little sand on the surface, except about Calmina, where it is more light and gravelly; but there is not to be found a stone so large as an egg in the whole country, so far as it has been visited by Europeans. Of farinaceous vegetables, the country yields a plentiful supply, in proportion to the culture. The Dahomese likewise cultivate yams, potatoes, the cassada or manioka, the plantain, and the banana. Pine-apples, melons, oranges, limes, guavas, and other tropical fruits, also abound in this fertile country. Nor is it destitute of productions adapted for commerce and manufacture; such as indigo, cotton, the sugar-cane, tobacco, palm-oil, with a variety of spices, particularly a species of pepper, very similar in flavor, and indeed scarcely distinguishable from the black pepper of the East Indies. The Dahomese, like the other inhabitants of tropical climates, plant twice a-year, viz., at the vernal and autumnal equinoxes; after which the periodical rains prevail. The harmattan, or dry wind, blows here strongly from the north-east; but Mr. Norris does not ascribe to it those pestilential qualities which have often been supposed, for while it parches up the ground, and injures every species of vegetable, it does not induce any fatal diseases. It is even said to cure cutaneous eruptions, and stop the progress of small pox, fluxes, and remittent fevers. The greatest bane of the climate is the periodical rains; which are attended with terri-

ble tornadoes. The language is that which the Portuguese call Lingua Geral, and is spoken not only in Dahomey Proper, but in Whidah, and the other dependent states. The Dahoman religion is vague and uncertain in its principles, and rather consists in the performance of some traditionary ceremonies, than of any fixed system of belief, or moral conduct. According to Mr. Norris, human sacrifices are not unfrequent among the Dahomese. Their kings, he says, water the graves of their ancestors every year with the blood of human victims. The same traveller mentions that the people in general take a peculiar pleasure in contemplating human skulls. The king said to a traveller, 'Some heads I place at my door: others I throw into the market-place. This gives a grandeur to my customs; this makes my enemies fear me; and this pleases my ancestors to whom I send them.' The king is even said to sleep in a room paved with the skulls of prisoners of distinction taken in war; and frequently to exclaim, 'Thus I can trample on the skulls of my enemies whenever I please.' It appears to be customary with the Dahomese to cut off the ears of the prisoners they take in war, and to send them as a present to the Grand Seignior: upwards of 300 pairs of ears have been sent to him at one time. They believe more firmly in their amulets and fetiches, than in the deity; their national fetiche is the tiger; and their houses or huts are decorated with images, tinged with blood, stuck with feathers, besmeared with palm oil, and bedaubed with eggs. The government is perhaps the most perfect despotism upon earth, and seems to admit of no intermediate degree of subordination between the king and slave. Norris having asked a soldier if he did not think the enemy numerous in a war in which he found the Dahomese engaged; the latter replied, 'I think of my king, and then I dare engage five of the enemy myself' He added, 'it is not material, my head belongs to the king, not to myself; if he pleases to send for it, I am ready to resign it; for if it is shot through in battle, it is no difference to me, I am satisfied.' A minister of state crawls towards the apartment of audience on his hands and knees, till he arrives in the royal presence, where he lays himself flat on his belly, rubbing his head in the dust, and uttering the most humiliating expressions. Being desired to advance, he receives the king's commands, or communicates any particular business, still continuing in a recumbent posture; for no person is permitted to sit, even on the floor, in the royal presence, except the women; and even they must kiss the earth when they receive or deliver the king's message. The king of Dahomey maintains a considerable standing army, commanded by an agaow or general, with several other subordinate military officers; the payment of these troops chiefly depends on the success of the expeditions in which they are engaged. Sometimes the king takes the field at the head of his troops; and on very great emergencies at the head of his women. For within the walls of the different royal palaces in Dahomey, are immured not less than 3000 women; several hundreds of whom are trained to arms under a female general, and subordinate officers appointed by the king. These Amazons are regularly exercised, and go through their evolutions with much expertness; their accoutrements being precisely similar to those of the male troops. The dress of the men in Dahomey consists of a pair of striped or white cotton drawers, of the manufacture of the country, over which they wear a large square cloth of the same, or of European manufacture. This cloth is about the size of a common counterpane for the middling class, but much larger for the grandees. It is wrapped about the loins, and tied on the left side by two of the corners, the others hanging down, and sometimes trailing on the ground. A piece of silk or velvet, of sixteen or eighteen yards, makes a cloth for a grandee. The head is usually covered with a beaver or felt hat, according to the quality of the wearer. The king, as well as some of his ministers, often wears a gold or silver laced hat and feather. The arms and upper part of the body remain naked, unless when the party travels, or performs laborious work, when the large cloth is laid aside, and the body is covered with a sort of frock or tunic without sleeves. The feet are always bare, none but the sovereign having a right to wear sandals. The dress of the women, though simple, consists of a greater number of articles than that of the men. They use several cloths or handkerchiefs; the neck, arms, and ancles, are adorned with beads and cowries; and rings of silver, or baser metal, encircle the fingers. The ears are so pierced as to admit the little finger, and a coral bead of that size, red sealing wax, or a piece of oyster-shell, stuck into each. Girls, before the age of puberty, wear nothing but a string of beads or shells round the loins, and young women usually expose the breasts. The general character of the Dahomese is marked by a strange mixture of ferocity and politeness. The former appears in the treatment of their enemies; the latter they possess far above most of the African nations with whom we have hitherto had any intercourse. Abomey, the capital, lies between long. 3° and 4° E., and in lat. 7° 50′ N.

DAILLE (John), a protestant minister of the seventeenth century, the most esteemed by the Catholics of all the controversial writers among the Protestants. He was tutor to two of the grandsons of the illustrious M. du Plessis Mornai. Mr. Daille having lived fourteen years in this family, travelled into Italy with his two pupils; one of them died abroad; with the other he visited Italy, Switzerland, Germany, Flanders, Holland, and England, and returned in 1621. He was received minister in 1623, and became chaplain to the family of M. Mornai. In 1625 he was appointed minister of the church of Saumur, and in 1626 removed to Paris, where he spent the rest of his life, and composed several works. His first work, Of the Use of the Fathers, was his masterpiece; printed in 1631. He died in 1670, aged seventy-seven.

DAILY. See DAY.

DAINT, *adj.*
DAIN'TEOUS, *adj.*
DAIN'TY, *n. s.* & *adj.*
DAIN'TILY, *adv.*
DAIN'TINESS, *n. s.*

Fr. *dain*, delicate. From Lat. *dens*, a tooth, because pleasing to the palate, as Minsheu says: delicious, exqui-

site, or of agreeable taste; elegant. The adverb and substantives follow the meanings of the adjective.

Be not desirous of his *dainties*; for they are deceitful meat. *Proverbs* xxiii. 3.

Both halle and chambres, eche in his degree,
Houses of office stuffed with plentee;
Ther mayst thou see of *deinteous* vitaille
That may be found as far as lasteth Itaille.
Chaucer. Cant. Tales.

Ther may men fest and realtee beholde,
And *deintees* mo than I can you devise,
But all to dere they bought it or they rise. *Id.*

Ne poets witt, that passeth painter farre
In picturing the parts of Beauty *daynt*,
So hard a workmanship adventure darre.
Spenser. Faerie Queene.

Higher concoction is required for sweetness, or pleasure of taste, and therefore all your *dainty* plumbs are a little dry. *Bacon.*

Truth is a naked and open day-light, that doth not shew the masks and mummeries and triumphs of the world, half so stately and *daintily* as candlelight. *Id.*

My house, within the city,
Is richly furnished with plate and gold,
Basons and ewers to lave her *dainty* hands.
Shakspeare.

Which of you all
Will now deny to dance? She that makes *dainty*,
I'll swear hath corns. *Id. Romeo and Juliet.*

Therefore to horse;
And let us not be *dainty* of leave-taking,
But shift away. *Id. Macbeth.*

Why, that's my *dainty*; I shall miss thee;
But yet thou shalt have freedom. *Id. Tempest.*

What should yet thy palate please?
Daintiness and softer ease,
Sleeked limbs and finest blood? *Ben Jonson.*

The duke exceeded in the *daintiness* of his leg and foot, and the earl in the fine shape of his hands. *Wotton.*

It was more notorious for the *daintiness* of the provision which he served in it, than for the massiness of the dish. *Hakewill on Providence.*

Why should ye be so cruel to yourself,
And to those *dainty* limbs, which nature lent
For gentle usage and soft delicacy? *Milton.*

She then produced her dairy store,
And unbought *dainties* of the poor. *Dryden.*

Your *dainty* speakers have the curse,
To plead bad causes down to worse. *Prior.*

The shepherd swains, with sure abundance blest,
On the fat flock and rural *dainties* feast. *Pope.*

DAI'RY, *n. s.* } From dey, says Lye, an
DAI'RY-MAID. } old word for milk. The milk-house, or place where it is managed. A dairy-maid and milk-maid, are nearly synonymous. In Gloucestershire, the dairy is still called a dey-house. Yet we supply a very early use of 'dairies.'

Citees and burghes, castles high and towres,
Thorpes and barnes, shepenes and *dairies*,
This maketh that thir ben no Faeries.
Chaucer. Cant. Tales.

Dairies being well housewived, are exceeding commodious. *Bacon.*

Children, in *dairy* countries, do wax more tall than where they feed more upon bread and flesh. *Id.*

You have no more worth
Than the coarse and country fairy,
That doth haunt the hearth or *dairy*. *Ben Jonson.*

She in pens his flocks will fold,
And then produce her *dairy* store. *Dryden.*

The poorest of the sex have still an itch,
To know their fortunes, equal to the rich;
The *dairymaid* enquires if she shall take
The trusty taylor, and the cook forsake. *Id.*

Come up quickly, or we shall conclude that thou art in love with one of Sir Roger's *dairy-maids*. *Addison.*

DAIRY. The operations of the dairy are connected with the domestic comforts of almost every English family. Man is here seen taking that useful and honorable direction of the works of nature for which he was designed, and his original companion, when a good housewife, is almost more than 'a *help* meet' for him. She is generally, and for the great benefit of both parties, entrusted with the practical management of this department, even of extensive farming establishments; and so large a portion of 'skill, frugality, cleanliness, and industry,' is required, as a modern author well observes, in hardly any other of the duties of a farmer's wife.

In our articles AGRICULTURE and BOS we have entered pretty largely into the natura. history and peculiarities of the only animal whose milk is extensively used in this country; we shall, in this paper, principally advert,—1. To the selection and general management of cows kept for the dairy, and by cow-keepers, as they are termed. 2. To the operations of the regular dairy in our cheese and butter counties, particularly the former: for in our article BUTTER will be found many useful directions with regard to that important manufacture. 3. We shall offer a few remarks on the structure of the dairy-house and its furniture.

i. *Of the selection and management of cows.*—In and about London the Holderness cows, a variety of the short-horned breed, are preferred. They have large carcases and yield a great quantity of milk. They take their name from a district in Yorkshire, where, as well as in the county of Durham, they are extensively bred; but most English counties have cultivated the breed in some degree. The Edinburgh dairy-men select the short-horned cow of Roxburghshire for similar reasons. Ayrshire has also a celebrated breed. In Lancashire (and in the neighbourhood of Liverpool this topic has been well canvassed) a native long-horned cow is said to have a general preference. The Guernsey breed is also highly valuable for its rich and abundant milk. At Caton, in Lancashire, in Mr. Hodgson's dairy establishment, a long-horned cow yielded eight quarts of milk a day and four pounds of butter per week on an average of twelve months, during which period one of the short-horned breed gave nine quarts per day and four pounds and a half of butter per week, both having what they chose to take of exactly the same kind of food. But the quantity each consumed was not noted. Dr. Anderson's strong recommendation of the Alderney cows, as affording 'the richest milk hitherto known; though there are many

individuals of different kinds which afford much richer milk than others,' as he says, seems long to have kept up the public preference for them in many districts.

Cows known to afford milk and butter of the best qualities, will of course be selected; but neither size nor breed seems to be a uniform criterion. Respectable cow-keepers rarely breed cattle, so that actual experience of the animal is the only final test; and the *quantity* of milk yielded seems to be, in this case, the sole ground of favoritism. Those who supply the metropolis with milk generally purchase their cows at from three to four years old, and in calf, at Islington, or Smithfield. Some of them own several hundreds. The number scattered in and about London is calculated at about 9000. Ten bulls are generally allowed to a stock of 300 cows, and the calves are sent to Smithfield market at one, two, or three days old. The quantity of milk given on an average, by each cow, is said to be nine quarts a day, or 3285 quarts per annum. The weekly expense of their food is estimated in the Middlesex Report at 10*s*. 3*d*., and the other charges about £5. 7*s*. per annum.

These cows are often confined in the cow-house, or the premises adjoining, during the whole time of their being devoted to the purposes of the cow-keeper; but respectable establishments turn them out to grass in the spring. In the night they are turned into their stalls, and fed at about three in the morning with half a bushel each of grains. From four to half-past six or seven they are milked for the retail dealers; then they receive a bushel each of green food or turnips, and soon after at the rate of a truss of meadow hay to ten cows. They are now turned out into the cow-yard, from eight to twelve o'clock, and about half-past one to three are milked and fed again as in the morning. This is the regular plan from September to May at least, or during the turnip season. At other parts of the year cabbages and tares diversify their food until they are turned out to grass (where that change of food is supplied to them), and now they remain in the field all night; but are frequently fed with grains to increase their milk, even at this period.

The cow-feeders of Edinburgh, according to the Supplement of the Encyclopædia Britannica, do not find it for their interest to keep their cows for more than one year, or even so long, if they can be fattened sooner. 'Their object is to have as great a quantity of milk as possible in the first instance; and when the cows fall off in milking, as they almost always do from between four and six months after calving, to prepare them speedily for the butcher. Most of the cows continue to give a good deal of milk while they are fattening, and even until they are sent to the shambles. It is expected they should sell to the butcher at the price paid by the cow-keeper. Their food in summer is brewers' and distillers' grains and dreg, wheat shellings or small bran, grass and straw; and in winter the same grains, dreg and bran, with turnips and potatoes, and hay instead of grass. When grains are scarce, cut or chopped hay is mixed with them. Some of them are sent to pasture in fields near the city, for about two months, during the best of the grass season; but even then a certain number must be kept in the house, for consuming the grains, which are purchased by contract for a whole year.'

'With regard to management, the cow-keepers begin with grains, dreg, and bran, mixed together, at five o'clock in the morning; feed a second time at one o'clock in the afternoon; and a third from seven to eight in the evening. Grass in summer, and turnips or potatoes in winter, are given at both intervals. A small quantity of straw is laid below the grass, which absorbs its moisture, and is eaten after the grass; and, in winter, straw or hay is given after the turnips. Part of the turnips or potatoes are boiled, particularly when there is a scarcity of grains, and intermixed with them. The expense in summer is said to be 2*s*. 10½*d*., and in winter 3*s*. 7½*d*. per day, for each cow. The cows are seldom milked more than twice a-day: for about a month after being bought, it is sometimes necessary to milk them three times. The common periods of milking are six o'clock in the morning, from three to four in the afternoon, and, when milked a third time, nine in the evening. Their produce in milk, when fed as already stated, may average about seven Scotch pints, or nearly twelve quarts and a half daily, per cow. When the cows are smaller, and not so well fed, five pints, or about nine quarts, are said to be the average. The price of milk in Edinburgh used to be 6*d*. per pint, but of late it has been sometimes lower in summer. This is said to be very little more than the price of the food. For interest of money, risk, expenses of management, and profit, there is the dung, worth £3. 10*s*. for each cow; some savings on the cows while at grass, which costs only 1*s*. 8*d*. per day; and, probably, a small advance of price may be commonly got from the butcher, when the cows are skilfully selected and well managed. There have been instances of cow-feeders contracting with others to retail their milk; but the practice is not common. The cow-keepers generally retail it themselves. In one instance a guinea a-week for the milk of each cow was paid by retailers to a farmer in the vicinity of Edinburgh.'

'Comparing the London and Edinburgh dairies,' continues the above writer, 'there seems to be a difference in favor of the best of the latter of no less than three quarts and a half per day. If this be the fact, perhaps it is owing to the whole of the Edinburgh cows being always in milk; none of them being kept for years, and bred from, as in the London dairies.'

Dr. Andersons's general aphorisms on the subject of the qualities of milk cannot be too well impressed on all dairy and cow-keepers. He says, 1. Of the milk drawn from a cow at any time, that which comes first is always thinnest, and continues to increase in thickness to the last drop. This is proved by experiment; and so great is the importance of attending to it, that the person who, by bad milking of his cows, loses but half a pint of his milk, loses, in fact, as much cream as would be afforded by six or eight pints at the beginning, and loses besides that part of the cream which alone can give richness and high flavor to his butter. 2. When milk throws up

cream to the surface, that portion which rises first will be thicker, and of better quality, as well as in greater quantity, than that which rises in a second equal portion of time. 3. Thick milk throws up a smaller quantity of cream to the surface than such as is thinner; but that cream is of a richer quality. If water be added to that thick milk, it will afford a considerably greater quantity of cream than before, but its quality is at the same time greatly debased. 4. Milk when carried in vessels to any distance, so as to suffer considerable agitation, never throws up cream so rich, nor in such quantity, as if the same had been put into the milk-pans without any agitation. From these aphorisms, the following corollaries are deducible. 1. The cows ought always to be milked as near the dairy as possible. 2. The milk of different cows should be kept by themselves, that the good cows may be distinguished from the bad. 3. For butter of a very fine quality, the first-drawn milk ought always to be kept separate from the last.

The Farmers' Magazine, vol. xv. supplies the following directions on the subject of feeding stalled cows, as those which are practically given by a very intelligent dairy-man, to his cow-feeder and milkers, at Farnham, in Surrey:—

1. *To the feeder.* 'Go to the cow-stall at six o'clock in the morning, winter and summer; give each cow half a bushel of the field-beet, carrots, turnips, or potatoes cut; at seven o'clock, the hour the dairy-maid comes to milk them, give each some hay, and let them feed till they are all milked. If any cow refuse hay, give her something she will eat, such as grains, carrots, &c., during the time she is milking, as it is absolutely necessary the cow should feed whilst milking. As soon as the woman has finished milking in the morning, turn the cows into the airing ground, and let there be plenty of fresh water in the troughs; at nine o'clock give each cow three gallons of a mixture composed of eight gallons of grains and four gallons of bran or pollard; when they have eaten that, put some hay into the cribs; at twelve o'clock give each three gallons of the mixture as before; if any cow looks for more, give her another gallon; on the contrary, if she will not eat what you give her, take it out of the manger, never at one time letting a cow have more than she will eat up clean. Mind and keep your mangers clean, that they do not get sour. At two o'clock give each cow half a bushel of carrots, field-beet, or turnips; look the turnips, &c., over well before you give them to the cows, as one rotten turnip, &c. will give a bad taste to the milk, and most likely spoil a whole dairy of butter. At four o'clock put the cows into the stall to be milked; feed them on hay as you did at milking time in the morning, ever keeping in mind that the cow whilst milking must feed on something. At six o'clock give each cow three gallons of the mixture as before. Rack them up at eight o'clock. Twice in a week put into each cow's feed, at noon, a quart of malt dust.'

2. *To the dairy-maid.* 'Go to the cow-stall at seven o'clock; take with you cold water and a sponge, and wash each cow's udder clean before milking; dowse the udder well with cold water, winter and summer, as it braces, and repels heats. Keep your hands and arms clean. Milk each cow as dry as you can, morning and evening, and when you have milked each cow, as you suppose, dry, begin again with the cow you first milked, and drip them each; for the principal reason of cows failing in their milk is from negligence in not milking each cow dry, particularly at the time the calf is taken from the cow. Suffer no one to milk a cow but yourself, and have no gossiping in the stall. Every Saturday night give in an exact account of the quantity of milk each cow has given in the week.'

'Where butter is the principal object,' says Mr. Loudon, 'such cows should always be chosen as are known to afford the best and largest quantity of milk and cream, of whatever breed they may be. But the quantity of butter to be made from a given number of cows must always depend on a variety of contingent circumstances; such as the size and goodness of the beasts, the kind and quantity of the food, and the distance of time from calving. As to the first, it need scarcely be mentioned that a large cow will give greater store of milk than one of a smaller size; though cows of equal size differ as to the quantity of cream produced from the milk of each: it is, therefore, on those cows whose milk is not only in large abundance, but which, from a peculiar inherent richness, yields a thick cream, that the butter dairy-man is to place his chief dependence; and where a cow is deficient in either of these, she should be parted with, and her place supplied by one more proper for this use. As to the second particular, namely, the kind and quality of the food, those who would wish to profit by a dairy, ought to provide for their cows hay of a superior goodness, to be given them in the depth of winter, and this in an unlimited degree, that they may always feed till they are perfectly satisfied. And, when the weather will permit, the cows should be indulged with an outlet to marshes or low meadow-grounds, where they may feed on such green vegetables as are present; which is far preferable to the practice of confining them the whole day on dry meat, will enable them to yield greater plenty of milk, and will give a fine yellow color to the butter even in the winter season.'

ii. *The operations of the regular dairies* of the cheese and butter counties have been justly stated to be very little improved by the application of modern science to farming. Dr. Anderson and Mr. Marshall are the only scientific writers whose attention seems to have been turned to the subject. The latter, in his *Rural Economy of Gloucestershire*, has registered a number of observations on the heat of the dairy-room, and of the milk when the rennet was applied in cheese-making; on the time required for coagulation; and the heat of the whey after: but the chemistry of these arts and productions has been wholly neglected at present. We cannot therefore do better than present the reader with the following popular account of the cheeses best known in this country.

Cheshire cheese is prepared in the following manner:—The evening's milk is not touched till the next morning, when the cream is taken off, and put to warm in a metal pan heated with boiling water. The cows being milked early in

the morning, the new milk, and that of the preceding night, thus prepared, are poured into a large tub, together with the cream. A piece of rennet, kept in luke-warm water from the preceding evening, is put into the tub in order to coagulate the milk; with which, if the cheese is intended to be colored, a small quantity of arnotto (or of an infusion of marigolds, or carrots,) is rubbed fine and mixed; the whole is then stirred together, and, being covered up warm, it is allowed to stand about half an hour, when it is turned over with a bowl, to separate the whey from the curds, and broken soon after into very small particles: the whey being separated, by standing some time, is taken from the curd, which sinks to the bottom, and is then collected into a part of the tub provided with a slip, or loose board, to cross the diameter of the bottom, for the sole purpose of effecting this separation; on which a board is placed, weighing from sixty to 120 pounds, in order to press out the whey. As soon as it acquires a greater degree of solidity it is cut into slices, and turned over several times, to extract all the whey, and again pressed with weights.

These operations may consume about an hour and a half. It is then taken from the tub and broken very small by the hand, salted, and put into a cheese-vat, the depth of which is enlarged by a tin hoop fitted to the top. The side is then strongly pressed, both by hand and with a board at top, well weighted; and wooden skewers are placed round the cheese, at the centre, which are frequently drawn out. It is then shifted out of the vat, a cloth being previously put on the top of it, and reversed on the cloth into another vat, or again into the same, if well scalded before the cheese be returned to it. The top, or upper part, is next broken by the hand down to the middle, salted, pressed, weighted and skewered as before, till all the whey is extracted. This being done, the cheese is again reversed into another vat, likewise warmed with a cloth under it, and a tin hoop, or binder, put round the upper edge of the cheese and within the sides of the vat; the former being previously enclosed in a cloth, and its edges put within the vessel. These various operations are performed from about seven o'clock in the morning till one at noon. The pressing of the cheese requires about eight hours more, as it must be twice turned in the vat, round which thin wire skewers are passed and shifted occasionally. The next morning it ought to be turned and pressed again, as likewise at night, and on the succeeding day, about the middle of which it is removed to the salting-room, where the outside is salted and a cloth binder tied round it. After this process the cheese is turned twice daily, for six or seven days; then left two or three weeks to dry, during which time it is turned and cleaned every day; and at length deposited in the common cheese-room, on a boarded floor covered with straw, where it is turned daily till it acquires a sufficient degree of hardness. The room should be of a moderate warmth, but no wind, or current of air, must be permitted to enter, as this generally cracks the cheese. Their outsides, or rinds, are sometimes rubbed with butter or oil to give them a coat.

'A dairy farm of 100 acres,' says an intelligent writer on the agriculture of Cheshire, 'is generally divided into the following proportions: from ten to fourteen acres of oats, from six to eight acres of fallow wheat, and the like quantity of summer fallow; the remainder consists of meadow and pasture, the former occupying about twelve acres. The good dairy farmer attends more to the size, form, and produce of the udder of his cow than to any fancied beauty of shape. This consideration induces him to be particular in the breeding and rearing his calves, and in the management of his cows during the winter and summer seasons. The annual quantity of cheese made from each cow varies from 50 to 500 lbs. and upwards, the produce depending on the goodness of the land, the quality of the pasture, the seasons, and the manner in which the stock are wintered. On the whole, the average produce may be estimated at 300 lbs. from each animal. The quantity of milk yielded daily by each cow, according to this estimate, will be about eight quarts, which it is calculated will produce one pound of cheese.

'On the dairy farms one woman-servant is generally kept to every ten cows, who is employed in winter in spinning, and other household business, but in milking is assisted by all the other servants of the farm. The cheese is chiefly sold in London, being exported from Chester, Frodsham-bridge, and Warrington. A large quantity goes to Liverpool and Bristol, some more is disposed of to the Yorkshire dealers, and some goes into Scotland. The proper season for calving is reckoned to be from the beginning of March to the beginning of May; and during these months there is more veal fed in Cheshire than in any other county in the kingdom, though generally killed to spare the milk.'

Gloucester cheese is made of milk immediately from the cow; but which, in summer, is thought too hot, and is therefore lowered to the requisite degree of heat, before the rennet is added, by pouring in skim-milk, or, if that will not answer, by the addition of water. As soon as the curd 'is come,' it is broken with a double cheese-knife, and also with the hand, in order to clear it from the whey, which is ladled off. The curd, being thus freed from the principal part of the whey, is put into vats, which are set in the press for ten or fifteen minutes, in order to extract all the remaining liquid. It is then turned out of the vats into the cheese-tubs again; broken small and scalded with a pail-full of water, lowered with whey, about three parts water to one of whey; and the whole is briskly agitated, the curd and water being equally mixed together. After having stood a few minutes, to let the curd subside, the liquor is poured off; and the former collected into a vat, the surface of which is, when about half full, sprinkled with a little salt, that is worked in among the curd. The vat is then filled up, and the whole mass turned two or three times in it, the edges being pared and the middle rounded up at each turning. At length the curd is put into a cloth and placed in the press, whence it is carried to the shelves, and turned, generally, once a day till it has acquired a sufficient degree

of compactness to enable it to undergo the operation of washing.

Parmesan cheese has long been famous for its richness and flavor; the following mode of manufacture is described in the Annales de Chemie. The size of these cheeses varies from sixty to 180 pounds, according to the number of cows in each dairy. During the heat of summer cheese is made every day, but in the cooler months milk will keep longer, and the cheese is made every other day. The summer cheese, which is the best, is made of the evening milk, after having been skimmed in the morning and at noon. Both kinds of milk are poured together into a caldron capable of holding about 130 gallons, of the shape of an inverted bell, and suspended on the arm of a lever so as to be moved off and on the fire at pleasure. In this caldron the milk is gradually heated to the temperature of about 120°; it is now removed from the fire, and kept quiet for five or six minutes. When all internal motion has ceased, the rennet is added; this substance is composed of the stomach of a calf, fermented together with wheaten meal and salt; and the method of using it is to tie a piece, of the size of a hazel nut, in a piece of linen cloth, and steep it in the milk, squeezing it from time to time; a sufficiency of rennet soon passes through the cloth into the milk, which is now to be well stirred, and afterwards left to rest that it may coagulate. In about an hour the coagulation is complete, and then the milk is again put over the fire, and raised to a temperature of about 145 degrees.

During the time it is heating the mass is briskly agitated, till the curd separates in small lumps; part of the whey is then taken out, and a small portion of saffron is added to the remainder in order to color it. When the curd is thus broken sufficiently small, nearly the whole of the whey is taken out and two pailfuls of cold water is poured in; the temperature is thus lowered so as to enable the dairyman to collect the curd, by passing a cloth underneath it and gathering it up at the corners; the curd is now pressed into a frame of wood like a bushel without a bottom, placed on a solid table and covered by a round piece of wood, having a great stone or weight on the top. In the course of the night it cools, assumes a firm consistence, and parts with the whey; the next day one side is rubbed with salt, and the succeeding day the cheese is turned and the other side is rubbed with salt in the same manner as before. This alternate salting of each side is practised for about forty days; after this period the outer crust of the cheese is pared off, and the fresh surface is coated with linseed oil. The convex sides are then colored red with arnotto, and the cheese is fit for sale.

The *Stilton* cheeses, called the Parmesan of England, are usually made in cylindrical vats, and weigh from six to twelve pounds each. Immediately after they are made they should be put into boxes made exactly to fit them, as they are so extremely rich, that, without this precaution, they would be apt to bulge out and break asunder. In these boxes they should be daily turned, and kept two years; they are then fit for sale. Some make them in a net like a cabbage-net, so that they appear when made like an acorn; but these are never so good as the others, having a thicker coat, and wanting the rich flavor and mellowness of the others. The manufacture of these cheeses is not confined to Stilton and its neighbourhood; as many other persons in Huntingdonshire, and also Rutland and Northampton shires, make a similar sort, sell them for the same price, and give them the name of Stilton cheeses. It is observed by Mr. Hazard, that, though the farmers about Stilton are remarkable for the cleanliness of their dairies, they take very little pains with the rennet; for if they did they would not have so many faulty and unsound cheeses. The inhabitants of other countries might make as good cheese as that of Stilton if they would adhere to the same plan, which is this:—They make a cheese every morning, and to this meal of new milk they add the cream taken from that which was milked the night before. This, and the age of their cheeses, it is said, are the only reasons why they are preferred to others, their land not being in any respect superior to that of other countries.

In the Bath Papers, Mr. Hazard gives the following receipt for making *rennet*. 'When the maw-skin is well prepared and fit for the purpose, three pints or two quarts of soft water, clean and sweet, should be mixed with salt, wherein should be put sweet-brier, rose-leaves and flowers, cinnamon, cloves, mace, and, in short, almost every sort of spice and aromatic that can be procured; and if these are put into two quarts of water, they must boil gently till the liquor is reduced to three pints, and care should be taken that this liquid is not smoked; it should be strained clear from the spices, &c., and, when not warmer than milk from the cow, it should be poured upon the vell or maw; a lemon may then be sliced into it, when it may remain a day or two; after which it should be strained again and put into a bottle, where, if well corked, it will keep good for twelve months, or more: it will smell like a perfume, and a small quantity of it will turn the milk, and give the cheese a pleasing flavor.'

The method of making *green cheese* we should not, perhaps, omit. In a cheese of this sort, of about ten or twelve pounds weight, an infusion is made by steeping about two handfuls of sage, and one of marigold leaves, with a little parsley, after being bruised, one night in a proper quantity of milk. In the morning the greened milk is strained off, and mixed with about one-third of the whole quantity to be run. The green and the white milks are then run separately, keeping the two curds distinct, until they are ready for vatting. The mixing of them depends on the fancy of the maker. In some cases the two are connected together, blending them in an even and intimate manner; in others, the green curd is broken down into irregular fragments, or cut out in irregular figures by means of proper tins. In the operation of vatting, the fragments or figures are placed on the outsides. The bottom of the vat is first set with them, crumbling the white or yellow curd among them. As the vat fills, others are placed at the edges, and the remainder buried flush with the top. In the management

afterwards, the same plan is pursued as those which we have already described for common cheese.

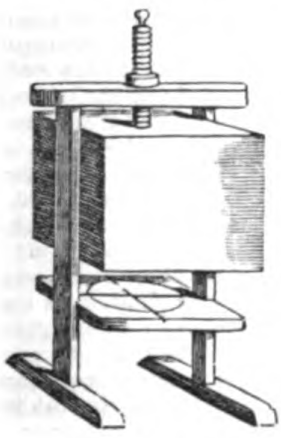
A *dairy house* should have a northern aspect, if possible, and good ventilation. The regulation of temperature may be accomplished on the plan suggested by Dr. Anderson, of having double walls and roofs; or by means of hollow walls; and for common purposes by the walls having a vacuity left, of eight or ten inches in width, between the lath and plaster. According to the nature of the business to be carried on in them, these buildings will be of course regulated, both in regard to their size and the number of their conveniences: as whether they are used for butter, cheese, or milk; the number of cows which are kept, &c. In the Gloucester dairy houses twenty feet by sixteen are the usual dimensions for forty cows; and thirty feet by forty for 100 cows.

A butter dairy should consist of three rooms, or apartments: namely, a milk room, a churning room with necessary apparatus, and a room for the different utensils, and the cleaning and airing them in, when it may be requisite. The cheese dairy should, in the same manner, be composed of three rooms; one for the reception of the milk; another for the scalding and pressing of the cheese; and a third for the purpose of salting it in. In addition, there ought to be a room for the stowing of the cheese, which may conveniently be a loft made over the dairy. It is frequently at a distance, which is inconvenient and troublesome.

The milk dairy only requires two good rooms, one for the reception of the milk, and another for the purpose of serving it out in, and that of scalding, cleaning, and airing the different utensils.

The *utensils of a cheese dairy* are, the cheese tub, in which the curd is broken, and prepared; the cheese-knife, commonly a thin spatula of wood or iron, for the purpose of cutting or breaking down the curd; the cheese-cloth, a piece of thin gauze, in which the cheese is placed in the press; a circular cheese-board; a strong wooden vat, and cheese-press.

The last article is generally constructed with a common wooden screw, though sometimes a large weight is used. The diagram represents a



very commodious one. Churns are almost endless in their variety of shapes, and supposed recommendations. Our article CHURN exhibits an improved mode of working this important utensil. We may add, in conclusion, that Mr. Dicas of Liverpool has lately invented a lactometer 'for ascertaining the richness of milk from its specific gravity, and its degree of warmth taken by a thermometer, on comparing its specific gravity with its warmth.'

It is a glass tube a foot long, with a funnel at top; the upper two inches being marked in small divisions, just under the funnel; when the instrument is filled to the height of one foot with milk, the depth of cream it yields is noted by the gradations on the upper part.

An invention of a similar kind has been noticed by the Highland Society of Scotland, in their Report for 1816: Mrs. Lovi's aereometric beads, by which the specific gravity of the milk is tried first when new milked, and again when the cream is removed.—'When milk is tried as soon as it cools,' observes this Report, 'say to 60°, and again, after it has been thoroughly skimmed, it will be found that the skimmed milk is of considerably greater gravity; and as this increase depends upon the separation of the lighter cream, the amount of the increase, or the difference between the specific gravity of the fresh and skimmed milk, will bear proportion to, and may be employed as a measure of, the relative quantities of the oily matter or butter contained in different milks.'—'The specific gravity of skimmed milk depends both on the quantity of the saccharo-saline matters, and of the curd. To estimate the relative quantities of curd, and by that determine the value of milk for the purpose of yielding cheese, it is only required to curdle the skim milk, and ascertain the specific gravity of the whey. The whey will, of course, be found of lower specific gravity than the skimmed milk, and the number of degrees of difference affords a measure of the relative quantities of the curd. According to this hypothesis, the aereometric beads may be employed to ascertain the qualities of milk, relatively both to the manufacture of butter and cheese.' But neither of these inventions, though in themselves ingenious, have been extensively used.

The *fixtures of a respectable dairy* are, a copper boiler in the scalding-room; benches and shelves in this room and the cheese-room; a bench or table about two feet wide round the milk-room; and a pump in the centre of the latter.

The utensils of a butter dairy are, pails; sieves of hair cloth, or silver-wire cloth for straining the milk; milk dishes or coolers; an ivory or bone cream-knife, and skimming dishes of willow or ivory; bowls; barrel, or other milk churns; butter-makers; and a portable rack for drying dishes in the air; tubs, &c.

DAIS, in botany, a genus of the monogynia order, and decandria class of plants; natural order, thirty-first, vepreculæ: involucrum tetraphyllous: COR. quadrifid, or quinquefid: FRUIT monospermous berry. Species three, natives of South Sea Isles.

DAI'SY, *n. s.* } Sax. ðæȝeɾeȝe day's-eye;
DAI'SIED, *adj.* } or, as Mr. Thomson conjectures, dah's, i. e., does-eye. Minsheu says, from δαιζω, to divide, because of the divisions of the leaves; but this etymology seems too profound for the name of a common flower.

A Frankelin was in this compagnie;
White was his berd as is the *dayesie*
Of his complexion he was sanguin.
Chaucer. Prol. to Cant. Tales.

When *daisies* pied, and violets blue,
And lady smocks all over white,
And cuckoo buds of yellow hue,
Do paint the meadows much bedight.
Shakspeare.

As he passed, the woods put forth their blossoms, the earth her primroses and *days-eyes*, to behold him.
Howel.

Now hawthorns blossom, now the *daisies* spring;
Now leaves the trees, and flowers adorn the ground.
Pope.

This will find thee picking of *daisies*, or smelling to a lock of hay. *Addison.*

Fair handed Spring unbosoms every grace;
The *daisy*, primrose, violet. *Thomson.*

DAISY. See BELLIS.

DAISY, BLUE, and DAISY, GLOBE, in botany. See GLOBULARIS.

DALBERGIA, in botany, a genus of the octandria order, and diadelphia class of plants. There are two filaments or stamina quadrifid at top. The fruit is pedicellated, not gaping; leguminous, membrano-compressed, and bearing seeds. Seven species; six India plants.

DALE, *n. s.* Teut. *thaal;* Ang.-Saxon, Spanish, Belgic, and Irish, *dal*, from *dalen, descendere*, to descend. A valley or low place.

As when old Father Nilus gins to swell,
With timely pride above the Aegyptian vale,
His fattie waves doe fertile slime outwell,
And overflow each plaine and lowly *dale*.
Spenser. Faerie Queene.

Stand ye secure, ye safer shrubs below,
In humble *dales*, whom heavens do not despight;
Nor angry clouds conspire your overthrow,
Envying at your too disdainful hight.
Bishop Hall. Defiance to Envy.

Before the downfall of the fairy state,
This *dale*, a pleasing region, not unblest,
This *dale* possessed they, and had still possessed.
Tickell.

He steals along the lonely *dale*.
Thomson's Spring.

Enough of Grongar, and the shady *dales*,
Of winding Towy, Merlin's fabled haunt,
I sung inglorious. *Byron.*

DALEA, in botany, a genus of plants of the diadelphia class and decandria order. Stamina five or ten, with the wings growing to their column, and united without separate filaments: leguminous: SEED one. Species fourteen, natives of North and South America.

DALECARLIA, or STORA-KOPPARBERG, as it has been recently named, is an extensive province of Sweden, bounded on the west by Norway, on the north by Herjedal, on the east by Helsingland, and on the south by Westmannland. It contains nearly 1300 English square miles, and about 125,000 inhabitants. Though its general aspect is hilly, the mountains are of little elevation, except in the neighbourhood of Norway; the greater part of the province is finely diversified with hills, dales, and lakes. It contains also two large rivers, the Dal and the Ljusne. In the south fine rye and barley fields meet the eye; and the potatoe is cultivated with some success; but the perpetual changes of the property and badness of the roads have been formidable obstacles to improvement. Lime-trees, elms, and maples, are found growing here nearly under the sixty-second degree of latitude. Dalecarlia has its chief riches, however, in its copper and iron mines, the chief of which (of copper) are at Fahlun and Afvestad. At the beginning of the present century the iron mines employed seventy-two smelting-furnaces, and fifty-six forges; the total annual produce being about 113,000 cwt. Sulphur is likewise found; and at Elfvedal are quarries of porphyry. The chief towns are Fahlun, Hedemora, and Soter. The Dalecarlians are of noble make and appearance, and have long been celebrated for their love of liberty. During the struggles of Gustavus Vasa for the crown, they obtained their chief privileges, and have since distinguished themselves on similar occasions. They seem to have imbibed from these circumstances much of the spirit of faction; and they have great contempt for the other Swedes.

DALECHAMPIA, in botany, a genus of the monadelphia order, and monœcia class of plants; natural order thirty-eighth, tricoccæ. Male involucrum, common and quadripartite: CAL. hexaphyllous; COR. none; nectarium laminated or scaly; the stamina monadelphous or coalited at the base, and polyandrous or numerous Female involucrum, common and triphyllous; style one: CAPS. tricoccous. Species two, viz. 1. D. scandens, a native of Jamaica, and a climbing plant which rises to a considerable height, and is remarkable for nothing but having its leaves armed with bristly hairs, which sting the hands of those who unwarily touch them. 2. D. Gorolata, a native of New Granada.

DALGARNO (George), a learned Scottish writer of the seventeenth century, was born at Aberdeen, and projected a plan for a universal language, in a work entitled Ars Signorum, Vulgo Character Universalis et Lingua Philosophica, London 1661, 8vo. This exhibits a classification, as the author and his admirers state, of all possible ideas, and a selection of characters adapted to them. He admits only seventeen classes of ideas, and uses the letters of the Latin alphabet, with two Greek characters. His plan resembles that of bishop Wilkins. He was the author also of Didascalophus, or the Deaf and Dumb Man's Tutor. Oxford, 1680, 8vo.

DALIN (Olof Von), a Swedish historian and poet, born at Winberga in Holland in 1708, was designed for the medical profession, which he abandoned. In 1735 he published a weekly paper, called The Swedish Argus, which gave great satisfaction to the diet, and he was rewarded with the situation of librarian at Stockholm. He has been termed the father of Swedish poetry. His two chief poems are, The Liberty of Sweden; and Brunhilda, a tragedy. In 1744 he was en-

gaged by the diet to write The History of Sweden, and successively raised himself to be preceptor to prince Gustavus, counsellor in ordinary of the chancery, knight of the northern star, and chancellor of the court. He died in 1763. He was the author of a Translation of Montesquieu's Causes de la Grandeur et de la Décadence des Romaines; and several poems, fables, &c., printed in 6 vols. 1767.

DALKEITH (Gael. i. e. a plain between two rivers), a parish of Scotland, in Mid Lothian, situated between the south and north Esk, and not exceeding two miles in length or breadth. The soil is partly light and sandy, partly deep clay.

DALKEITH, a considerable town in the above parish, is six miles south-east of Edinburgh, seated on the north Esk. It contains several good streets, and has a weekly market on Thursday, reckoned one of the best in Scotland for grain; which is all sold for ready money, and supplies the west country about Glasgow, Paisley, Carron, &c., as well as Edinburgh in part. It has also markets on Monday and Tuesday for meal and cattle, in winter; and a fair the third Tuesday in October. The seat of the duke of Buccleuch is the principal ornament of the place, and the plantations which surround it are laid out with great taste. The house was built in the beginning of the eighteenth century on the site of Dalkeith castle. Long. 2° 20′ W., lat. 55° 50′ N.

DALKEITH CASTLE formerly stood at the east end of the town of Dalkeith. It was built on a perpendicular rock of great height, and inaccessible on all sides, except the east where it was defended by a fosse, through which the river is said to have run. On the defeat of the Scots at the battle of Pinkie, in 1547, James earl of Morton, Sir David Wedderburn, and many others, fled to this castle; where they were besieged for some time by the English, but were obliged to surrender at last for want of provisions. Here, in 1660, it being the head quarters of general Monk, the restoration of monarchy, by calling home Charles II. was planned.

DALLA, an important island and district of the Delta of the Irrawuddy River, Hindostan. It is covered generally with wood, which shelters numerous wild beasts, but contains also fine pastures, and produces rice and salt in considerable quantities. During the contest between the Birmans and Peguers, in the middle of the last century, this district was often overrun by both armies. The principal towns are Dalla, Cowack, and Gnapee Ghewen.

DA'LLY, *v. a.* & *n.* } Ancient Belg. *dollen*;
DAL'LIANCE, *n. s.* } Goth. *duella*; Saxon,
DAL'LIER, *n. s.* } dwolian. To talk foolishly or idly. Hence both to delay, and to trifle in love or otherwise.

They that would not be reformed by that correction, wherein he *dallied* with them, shall feel a judgment worthy of God. *Wisdom* xii. 26.

A Frere ther was a wanton and a mery,
A limitour, a full solempne man:
In all the ordres foure is non that can
So moche of *daliance* and fayre language.
Chaucer. Prol. to Cant. Tales.

With faire disport, and courting *dalliaunce*
She intertaindo her lover all the way;
But when she saw the knight his speare advance,
Shee soone left off her mirth and wanton play,
And bad her knight addresse him to the fray.
Spenser. Faerie Queene.

The daily *dalliers*, with pleasant words, with smiling countenances, and with wagers purposed to be lost, before they were purposed to be made. *Ascham.*

Not *dallying* with a brace of courtezans,
But meditating with two deep divines. *Shakspeare.*

She her airie buildeth in the cedar's top,
And *dallies* with the wind, and scorns the sun. *Id.*

— Good lord, you use this *dalliance* to excuse
Your breach of promise. *Id.*

Nor gentle purpose, nor endearing smiles,
Wanted; nor youthful *dalliance*, as beseems,
Fair couple linked in happy nuptial league,
Alone as they.

He left his cur, and laying hold
Upon his arms, with courage bold
Cried out, 'tis now no time to *dally*,
The enemy begin to rally. *Hudibras.*

I'll head my people;
Then think of *dalliance* when the danger's o'er:
My warlike spirits work now another way,
And my soul's tuned to trumpets. *Dryden.*

One hundred thousand pounds must be raised, for there is no *dallying* with hunger. *Swift.*

DALMANUTHA, in ancient geography, a city of Judea, on the east side of the sea of Tiberias; either the same with Magdala, or situated near it. Hence Mark says, viii. 10, that our Saviour and his disciples landed in the parts of Dalmanutha: while Matthew, recording the same fact, says that they came into the coast of Magdala.

DALMATIA, a country of Europe, in a former maritime division of Austria, was bounded on the north by Bosnia and Croatia, on the east by Servia, and on the south and west by the Adriatic. The country is, as it were, strewed with mountains and hills, which are not altogether unfruitful; olives, vines, myrtles, and a great variety of palatable and wholesome vegetables growing amongst them. It has also many fertile plains; and feeds considerable numbers of horned cattle and sheep. The rivers of Dalmatia have no long course, but are mostly navigable. The principal are the Cherka and the Narenta. The air is temperate and pure. The Dalmatians use the Sclavonian language and customs, and profess the Roman Catholic religion.

Dalmatia was distinguished as follows:—1. Hungarian Dalmatia, lying on the upper part of the Adriatic Sea, containing part of ancient Liburnia, and which is more generally called Morlachia. 2. Venetian Dalmatia, or that part which was possessed by the Venetians, lying to the south-east of Hungarian Dalmatia, and abounds in ancient castles and fortresses. The inhabitants are estimated at 25,000, and are distinguished by different names, as well as diversity of manners. See MORLACHS, and UHLANS. They are warlike, intrepid soldiers, and excellent seamen. The nobility and people were well attached to the republic; mildness made them faithful subjects to Venice; their privileges were

respected, and it was dangerous to offend them. The chief towns are Spalatro, the capital, Amussa, Narenta, Sebenico, Trau, and Zara. Besides what the Venetians possessed on the continent, several islands in the Adriatic belong to them, which are considered as part of Dalmatia. This portion belonging to Austria, is strictly the only part to which the name Dalmatia now applies. 3. Turkish Dalmatia, lying east of Venetian Dalmatia. The principal towns are, Herzegovina, the capital, Clinova, and Scardova. 4. The late republic of Ragusa formed another part of Dalmatia.

Dalmatia, Islands of. Besides the islands included in the above province, Dr. Oppenheim mentions other seven islands of the late maritime division of Austria, as forming two distinct provinces; viz. the Four islands of Quarnaro, and the Three Dalmatian islands, peculiarly so called, viz. Brazza, Lesina, and Curtola.

Dalmatia, Lower, or Albania, a province of the late maritime division of Austria, divided from the ex-devant Venetian Dalmatia, by the late republic of Ragusa, and a part of Turkish Dalmatia. It comprehended the canal, town, &c., of Cattaro, the mountains and valleys of Buda, and the bailiwic of Pastrovichi. It is mountainous, but produces some corn, much oil, and fine fruits. The inhabitants have also considerable trade in the Levant.

The name of Dalmatia is said to be derived from the ancient capital Delmium, or Delminium. In the latter ages of the Roman empire this country suffered frequently from the inroads of barbarians, and was finally incorporated with Hungary in the twelfth century. When the Venetians, however, had occupied the sea-coast, they succeeded in the fifteenth century in conquering the interior, which long remained in their possession. By the treaty of Campo Formio, in 1797, the whole was ceded to Austria; but after the campaign of 1805 Buonaparte claimed it as king of Italy, and afterwards united it with the Illyrian provinces. Cattaro, and the southern part, were in 1806 seized by the Russians; but delivered up to the French at the peace of Tilsit. In the final arrangements of 1814 the whole was again transferred to Austria.

DALRYMPLE (Sir David), an eminent and learned judge of Scotland, born at Edinburgh, Oct. 26th, 1726. He was educated at Eton, and from thence went to Utrecht, where he remained till after the rebellion in 1746. He was admitted a member of the Faculty of Advocates, Feb. 23rd 1748. In March, he 1766, was appointed a lord of Session, and in May, 1776, one of the lords of Justiciary. During this time he wrote several occasional papers, in The World, the Gentleman's Magazine, &c. In 1773 he published his Remarks on the History of Scotland, which first displayed his talent for minute and accurate enquiry into doubtful points of history. This prepared the public mind for his Annals of Scotland, of which the first appeared in 1776, and the second in 1779, and fully answered the hopes he had excited. In 1786 lord Hailes evinced his unshaken attachment to religious truth, by publishing a 4to. volume, entitled, An Enquiry into the Secondary Causes, which Mr. Gibbon has assigned for the rapid progress of Christianity. This was the last work he published; but he attended his duty on the bench till within three days of his death, which happened Nov. 29th, 1792, in the sixty-sixth year of his age. Lord Hailes was twice married; first to the daughter of the late lord Coalston, and afterward to the daughter of lord Kilkerran, by each of whom he had one daughter. As he left no male issue, his nephew succeeded to his title. His knowledge of the laws was accurate and profound; and he applied it in judgment with the most scrupulous integrity. Affectionate to his family and relations, simple and mild in his manners, pure and conscientious in his morals, enlightened and entertaining in his conversation, he left society only to regret that, devoted as he was to more important employments, he had so little time to spare for intercourse with them. His labors in illustration of the history of his country, and many other works of profound erudition, remain as monuments of his accurate and faithful researches for materials, and his sound judgment in the selection of them. Besides the works above enumerated, lord Hailes published the following: 1. Memorials and Letters relating to the History of Great Britain, in the reign of James I. 8vo. 1765. 2. The Secret Correspondence between Sir Robert Cecil and James VI. 12mo. 1766. 3. Accounts of the Persecution of Charles II. after the Battle of Worcester, 8vo. 1766. 4. Memorials and Letters relating to the History of Great Britain, in the reign of Charles I. 8vo. 1767. 5. Canons of the Church of Scotland, drawn up in the provincial Synod held at Perth, 1242, 4to. 1769. 6. Historical Memorials concerning the Provincial Councils of the Scottish Clergy, 4to. 7. Ancient Scottish Poems, from a MS. of George Bannatyne, 12mo. 1770. All in 4to. in 1787. Lord Hailes has also left many valuable MSS.

DALTON John, D.D. an eminent divine and poet, was the son of the Rev. John Dalton, rector of Dean in Cumberland, where he was born in 1709. He was educated at Queen's College, Oxford; and became tutor to lord Beauchamp, only son of the earl of Hertford; during which time he adapted Milton's mask of Comus to the stage, by a judicious insertion of several songs and different passages selected from other of Milton's works, as well as of several songs and other elegant additions of his own, suited to the characters and to the manners of the original author. During the run of this piece he industriously sought out a grand-daughter of Milton's, oppressed both by age and poverty, and procured her a benefit from it, the profits of which amounted to a considerable sum. He was promoted by the king to a prebend of Worcester; where he died on the 2nd of July 1763. Besides the above, he wrote a descriptive poem, addressed to two ladies at their return from viewing the coal-mines near Whitehaven; and Remarks on twelve historical designs of Raphael, and the Museum Græcum et Ægyptiacum.

Dalton, a market town of Lancashire. It is seated on the spring-head of a river in a champaign country, not far from the sea; and the ancient castle is made use of to keep the records,

and prisoners for debt, in the liberty of Furness. The church is an ancient, neat building, and has an organ. This town, being in an excellent sporting country, is much resorted to during the season. The port here is large and commodious; and a light-house has been erected at the south end of the Isle of Walney. A canal has been cut from the sea up to this town, one mile and a half in length, capable of navigating ships of great burden, which is of great advantage to the trade and commerce of the place. Market on Saturday. This is four miles from Ulverston, and 275 N.N.W. of London.

DAM, *n. s.* } Fr. *dame*; Span. *dama*; Heb.
DAME, *n. s.* } and Chald. אם; Arab. *ama*; Lat. *dama*, *domina*; which, however, Minsheu derives from Heb. רמח, to govern; Sans. *amma*; Teut. *ama*, to which Thomson thinks Sax. dey, or die, one that gives milk, has been prefixed. A human mother; a female who has borne young animals. Also, a title of honor; a lady; an elderly woman.

But of hire song, it was as loud and yerne
As any swalow sitting on a berne;
Therto she coude skip and make a game,
As any kid or calf folowing his *dame*.
Chaucer. Cant. Tales.

Their *dam* upstart out of her den effraide,
And rushed forth, hurling her hideous taile
About her cursed head. *Spenser. Faerie Queene.*

This brat is none of mine;
It is the issue of Polixena:
Hence with it, and, together with the *dam*,
Commit them to the fire.
Shakspeare. Winter's Tale.

The *dam* runs lowing up and down,
Looking the way her harmless young one went,
And can do nought but wail her darling loss.
Id.

Not all these lords do vex me half so much
As that proud *dame*, the lord protector's wife. *Id.*

Bless you, fair *dame*! I am not to you known,
Though in your state of honor I am perfect. *Id.*

Another layeth a well-marked lambe,
Or spotted kid, or some more forward steere,
And from the payle doth praise their fertile *dam*.
Bp. Hall. Defiance to Envy.

Who would not repeat that bliss,
And frequent sight of such a *dame*
Buy with the hazard of his fame? *Waller.*

Mother, says a sick kite, let me have your prayers. Alas, my child, says the *dam*, which of the gods shall I go to? *L'Estrange.*

They killed the poor cock; for, say they, if it were not for his waking our *dame*, she would not wake us. *Id.*

Birds bring but one morsel of meat at a time, and have not fewer, it may be, than seven or eight young in the nest together, which, at the return of their *dams*, do all at once, with equal greediness, hold up their heads and gape. *Ray.*

The word *dame* originally signified a mistress of a family, who was a lady; and it is used still in the English law to signify a lady: but in common use, now-a-days, it represents a farmer's wife, or a mistress of a family of the lower rank in the country.
Watts's Logick.

As is the hedghog's,
Which sucks at midnight from the wholesome *dam*
Of the young bull, until the milkmaid finds
The nipple next day sore and udder dry. *Byron.*

No spectre gaunt she saw of bones entwined,
With scythe wide brandished as to sweep mankind,
But a plump *dame*, of pampered aspect sly,
With fiendlike, scowling merriment of eye.
Dr. T. Brown.

DAM, *v. a.* & *n. s.* From Gr. δαμαζω, δαμαω, to reduce to quiet, or stillness; Ang.-Sax. bemman; Belg. *damm*. To confine and overcome the force of water; to shut up by moles or banks. To stop up an opening. Shakspeare applies it to fire, and Milton to light, restrained or confined.

I'll have the current in this place *dammed* up;
And here the smug and silver Trent shall run
In a new channel, fair and evenly.
Shakspeare. Henry VI.

The more thou *dammest* it up, the more it burns. *Id.*

Now will I *dam* up this thy yawning mouth
For swallowing the treasure of the realm. *Id.*

Moon! if your influence be quite *dammed* up
With black usurping mists, some gentle taper,
Though a rush-candle from the wicker hole
Of some clay habitation, visit us
With thy long levelled rule of streaming light.
Milton.

As when the sea breaks o'er its bounds,
And overflows the level grounds,
Those banks and *dams*, that like a skreen
Did keep it out, now keep it in. *Hudibras.*

Home I would go,
But that my doors are hateful to my eyes,
Filled and *dammed* up with gaping creditors,
Watchful as fowlers when their game will spring.
Otway.

Not with so fierce a rage the foaming flood
Roars, when he finds his rapid course withstood,
Bears down the *dams* with unresisted sway,
And sweeps the cattle and the cots away.
Dryden.

The inside of the *dam* must be very smooth and straight; and if it is made very sloping on each side, it is the better. *Mortimer's Husbandry.*

'Tis you must drive that trouble from your soul;
As streams, when *dammed*, forget their ancient current,
And, wondering at their banks, in other channels flow.
Smith.

DAMAGE, *v. a.*, *v. n.* & *n. s.* } Fr. *domage*,
DAMAGEABLE, *adj.* } *dommage*; Goth. *damnage*, from Lat. *damnum*, injury. To injure hurt, impair; and the injury, or harm done. Damages are an estimated value or supposed, reparation of injury done. Damageable goods are those readily susceptible of injury.

His heart exalts him in the harm
Already done, to have dispeopled heaven,
My *damage* fondly deemed! *Milton.*

Gross errours and absurdities many commit for want of a friend to tell them of them, to the great *damage* both of their fame and fortune. *Bacon.*

The bishop demanded restitution of the spoils taken by the Scots, or *damages* for the same. *Id.*

Such as were sent from thence did commonly do more hurt and *damage* to the English subjects than to the Irish enemies, by their continual cess and extortion.
Davies.

They believed that they were not able, though they should be willing to sell all they have in Ireland, to pay the *damages* which had been sustained by the war. *Id.*

I consider time as an immense ocean, into which many noble authors are entirely swallowed up, many very much shattered and *damaged*, some quite disjointed and broken in pieces. *Addison.*

When the judge had awarded due *damages* to a person into whose field a neighbour's oxen had broke, it is reported that he reversed his own sentence, when he heard that the oxen which had done this mischief were his own. *Watts.*

Obscene and immodest talk is offensive to the purity of God, *damageable* and infectious to the innocence of our neighbour, and most pernicious to ourselves. *Government of the Tongue.*

I have been for fifteen years a very laborious member of parliament; and in that time have had great opportunities of seeing with my own eyes the working of the machine of our government; and remarking where it went smoothly and did its business, and where it checked in its movement, or when it *damaged* its work. *Burke.*

DAMAR, a considerable town and district of Arabia, in the country of Yemen. It is well-built, and has a large castle and a university of the Mussulman sect Zeidi, which, Niebuhr was informed, contained 500 students. It is said to contain 5000 houses. Distant fifty-six miles north of Sana, and ninety-four north-east of Mocha.

DAMASCENE, Lat. *damascenus*. From Damascus; a plum. See PRUNUS.

In fruits the white commonly is meaner, as in pears, plums, and *damascenes*; and the choicest plums are black. *Bacon.*

DAMASCENUS (John), an illustrious father of the church in the eighth century, born at Damascus, where his father, though a Christian, enjoyed the office of counsellor of state to the Saracen caliph, to which the son succeeded. He retired afterwards to the monastery of St. Sabas, and spent the remainder of his life in writing books of divinity. His works have been often printed; but the Paris edition, in 1712, two vols. folio, is esteemed the best.

DAMASCIUS, a celebrated heathen philosopher, born at Damascus, A. D. 1540, when the Goths reigned in Italy. He wrote the life of his master, Isidorus, and dedicated it to Theodora, a very learned and philosophical lady, who had also been a pupil to Isidorus. In this life, which was copiously written, he frequently made oblique attacks on the Christian religion. We have nothing remaining of it but some extracts preserved by Photius. Damascius succeeded Theon in the rhetorical school, and Isidorus in that of philosophy, at Athens.

DAMASCUS, דמשק, Heb.; a very ancient city of Syria, in Asia. The ancients supposed it to have been built by one Damascus, from whom it took its name; and one of the medals of the city represents a hind suckling a child, supposed to have an allusion to the founder of the city, who is said to have been brought up by dama, a hind, whence his name. This city was in being in the time of Abraham, Gen. xiv. 15; and consequently may be looked upon as one of the most ancient cities in the world. In the time of David it seems to have been a very considerable place; as the sacred historian tells us that the Syrians of Damascus sent 20,000 men to the relief of Hadadezer, king of Zobah. We are not informed whether, at that time, it was governed by kings, or was a republic. Afterwards, however, it became a monarchy, and proved very hostile to the kingdom of Israel, and would have destroyed it entirely, had not the Deity miraculously interposed in its behalf. This monarchy was destroyed by Tiglath Pileser, king of Assyria, and Damascus was never afterwards governed by its own kings. From the Assyrians and Babylonians it passed to the Persians, and thence to the Greeks, under Alexander the Great. After his death it belonged, with the rest of Syria, to the Seleucidæ, till their empire was subdued by the Romans, about A. A. C. 70. From them it was taken by the Saracens, A. D. 633; and it is now in the hands of the Turks.

Notwithstanding the tyranny of the Turkish government, Damascus is still a considerable place. It is situated in a plain of so great extent, that one can but just discern the mountains, which compass it on the other side. It stands on the west side of the plain, about two miles from the head of the river Barrady, which waters it. It is of a long, straight figure, extending about two miles in length, adorned with mosques and steeples, and encompassed with gardens, computed to be full thirty miles round. The river Barrady, as soon as it issues from the clefts of the Antilibanus into the plain, is divided into three streams; the middle one, which is the largest, runs directly to Damascus, and is distributed to all the cisterns and fountains of the city. The other two seem to be artificial; and are drawn round, one to the right, and the other to the left, on the borders of the gardens, into which they are let by little currents, and dispersed every where. This river finally flows into a hollow of the south-east desert, called Behairat-el-Merdi, the Lake of the Meadow.

The houses of the city, whose streets are very narrow, are all built on the outside, either with sun-burnt bricks, or Flemish wail; and yet it is no uncommon thing to see the gates and doors adorned with marble portals, carved and inlaid with great beauty and variety; and, within these portals, to find large courts, beautified with fragrant trees and marble fountains, and surrounded with splendid apartments. In these apartments the ceilings are usually richly painted and gilded; their duans, which are a sort of low stages, seated in the pleasantest part of the room, and elevated about sixteen or eighteen inches above the floor, are floored, and adorned on the sides with variety of marble, mixed in mosaic knots and mazes, spread with carpets, and furnished all round with bolsters and cushions, to the very height of luxury. No city in the world has an equal number of fountains, or more splendid private houses. The interior of some of them is said to contain furniture worth £5000 or £6000. In this city are shown the church of John the Baptist, now converted into

a famous mosque; the house of Ananias, which is only a small grotto, or cellar, wherein is nothing remarkable; and the house of Judas, with whom Paul lodged. In this last is an old tomb, said to be that of Ananias, which the Turks hold in such veneration, that they keep a lamp continually burning over it. There is a castle belonging to Damascus, which is like a little town, having its own streets and houses; and here a magazine of the famous Damascus steel was formerly kept. The principal public building worth notice is the Zekia mosque, remarkable for its noble dimensions and general architecture. This is of the Corinthian order throughout; it has two minarets, and is of an oblong figure, crowned by a large stone cupola, supported by four enormous pillars. The gateway is supported by large columns of red granite; on the outside is a superb fountain, which throws the water twenty feet high. Another, with a grove of trees on each side, stands in a spacious court within. Numerous columns support galleries within, and portions of the walls exhibit the remains of mosaic work, with which they were once adorned. An hospital for the indigent sick is attached. This mosque is said to have been originally the cathedral church of Damascus. The Christians affirm, that it was dedicated to St. John Damascenus, whose body reposes here; but the Turks call it the mosque of St. John the Baptist. Another mosque is beautifully adorned with all kinds of fine marble, like mosaic pavement; and the tower or minaret of a third, is entirely cased with pantiles. The finest of its numerous hospitals is that constructed by the sultan Selim, consisting of a spacious quadrangle, lined by an interior colonade, which is entirely roofed by forty small domes, covered with lead. On the south side of the court there is a mosque, with a magnificent portico, and two exquisite little minarets, surmounted by a spacious cupola. The patriarch of Antioch has his see at Damascus, where he commonly resides. There is also a Greek, Maronite, Syrian, and Armenian church; and three convents of Franciscan monks. There are eight Jewish synagogues.

Damascus was, at one time, noted for its general ill-treatment of Europeans; but, although no one can venture to traverse the streets, unless in the Oriental costume, without insult, there is now little difference between the citizens of Damascus, and those of other eastern cities. A number of persons are generally seen in the streets, calling themselves saints, and appearing like ideots or madmen.

The fruit-tree, called the damascene, and the flower, called the damask-rose, were transplanted from the gardens belonging to this city; and the silks and linens, known by the name of damasks, were first manufactured by its inhabitants. Niebuhr, who has given a plan of this city, makes it 3250 toises, or something less than a league and a-half in circumference, and it probably contains 180,000 inhabitants. The greater part of these are Arabs and Turks; the number of Christians is estimated at 20,000. Damascus is the rendezvous for all the pilgrims who go to Mecca, from the north of Asia, as Cairo is for those from Africa. Their number, every year, amounts to from 30,000 to 50,000, Many of them repair here for four months before the time, but the greatest number only at the end of the Ramadan. Damascus then resembles an immense fair; nothing is to be seen but strangers from all parts of Turkey, and even Persia; and every place is full of camels, horses, mules, and merchandise. By means of this caravan, Damascus is become the centre of a very extensive commerce. By Aleppo, the merchants of this city correspond with Armenia, Natolia, Diarbekir, and even with Persia. They send caravans to Cairo, which, following a route frequented in the time of the patriarchs, take their course by Djesryakoub, Tiberias, Naplous, and Gaza. In return, they receive the merchandise of Constantinople and Europe, by way of Said and Bairout. The home consumption is supplied by silk and cotton-stuffs, which are manufactured here in great quantities, and are very well made; by the dried fruits, of their own growth, and sweetmeats, cakes of roses, apricots, and peaches, of which Turkey consumes to the amount of about 40,000 lbs. The remainder, paid for by course of exchange, occasions a considerable circulation of money, in custom-house duties, and the commission of the merchants. The pachalic of Damascus comprehends nearly the whole eastern part of Syria. In this vast extent of country, the soil and its productions are very various; but the plains of Hauran, and those on the banks of the Orontes, are the most fertile; they produce wheat, barley, sesamum, doura, and cotton. This city was one of the objects of Buonaparte's ambition while in the east: a small detachment of his cavalry had defeated the pacha's troops, and he was about to proceed to take possession of Damascus, when he was checked in his progress, in this direction, by British prowess and the disastrous results of the siege of Acre. In the year 1811 the city was menaced by the Wahabees, but the pacha going out to meet them, at the head of 6000 men, they retired. Damascus is 190 miles south of Antioch, 136 N. N. E. of Jerusalem, and 276 S. S. W. of Diarbekir.

DAMASCUS STEEL. See STEEL and CUTLERY.

DAM'ASK, *v. a.* & *n. s.* } Fr. *damasquin*;
DAMASKEN'ING, *n. s.* } Ital. *damaschino*.
DAM'ASK-ROSE, *n. s.* } Damask is a silk, first manufactured at Damascus: damaskening an operation of cutlery, whereby the blades of swords and locks of pistols are ornamented, as at Damascus: and damask-rose, a rose variegated, after the manner of damask, with red and white: hence the damask of a cheek.

Not any weaver which his work doth boast
In diaper, *damask*, or in lyne. *Spenser.*

Damask-roses have not been known in England above one hundred years, and now are so common. *Bacon.*

And for some deale perplexed was her spirit,
Her *damask* late, now changed to purest white. *Fairfax*

They sat recline
On the soft downy bank, *damasked* with flowers. *Milton.*

Wipe your shoes, for want of a clout, with a *damask* napkin. *Swift's Rules to Servants.*

Around him dance the rosy hours,
And *damasking* the ground with flowers,
With ambient sweets perfume the morn. *Fenton.*

No gradual bloom is wanting from the bud,
Nor broad carnations, nor gay spotted pinks,
Nor, showered from every bush, the *damask-rose.*
Thomson.

Loud claps the grinning fiend his iron hands,
Stamps with black hoof, and shouts along the lands;
Withers the *damask* cheek, unnerves the strong,
And drives with scorpion lash the shrieking throng.
Darwin.

DAMASK, a silk stuff, with a raised pattern, so that the right side of the damask is that which has the flowers raised above the ground. Damasks should be of dressed silk, both in warp and woof. Those made in France are half an ell in breadth.

DAMASK is also a kind of wrought linen, made chiefly in Flanders; so called, because its large flowers resemble those of damasks. It is chiefly used for tables.

DAMASKEENING, or DAMASKING, partakes of the mosaic, of engraving, and of carving; like the mosaic, it has inlaid work; like engraving, it cuts the metal, representing divers figures; and, as in chasing gold and silver, is wrought in relievo. There are two ways of damasking; the one, which is the finest, is when the metal is cut deep with proper instruments, and inlaid with gold and silver wire; the other is superficial only.

DAMAUN, a sea-port in the province of Aurungabad, Hindostan, 100 miles north from Bombay. The Portuguese, who still retain it, reduced this place so early as 1531. Its houses and churches make a conspicuous figure from the sea; but the commerce is now reduced. Ship-building, however, is carried on to a considerable extent, the teak-forests of the vicinity supplying excellent timber. A ship, coppered, and equipped for sea, in the European style, in 1800, cost about £14 sterling per ton, according to Mr. Hamilton. The harbour is commodious for vessels of a small size.

DAMIANISTS, in church history, a branch of the ancient Acephali Severitæ. They agreed with the catholics in admitting the sixth council, but disowned any distinction of persons in the God-head; and professed one single nature incapable of distinction; yet they called God 'the Father, Son, and Holy Ghost.'

DAMIENS (Robert Francis), a French assassin, of some notoriety for his attempt on the life of Louis XV., and for the tortures inflicted on him for that attempt, was born in Artois in 1715. He was the son of a small farmer; and his character, even in his childhood, procured him the name of Robert le Diable. He enlisted, when young, for a soldier, deserted, and afterwards became the servant of an officer, whom he attended to the siege of Philipsburgh. He was afterwards a domestic in the Jesuits' College at Paris. He finally left their service in 1738. He is accused of having afterwards poisoned one of his masters, after which he fled into Flanders. On the last day of the year 1756, he returned to Paris, whence he proceeded to Versailles; and on the evening of the 5th of January, 1757, went to the palace, and, as his majesty was about to get into his carriage, to go to Trianon, pushing aside the attendants, made his way up to the king, and stabbed him in the side. He made no effort to escape, but was taken immediately; and, after having been interrogated at Versailles, was transferred to Paris. On his trial he denied having any accomplices, nor did the application of the most cruel tortures wring from him any probable accusation. On being questioned as to the cause of his crime, he said he did not mean to kill the king, and that he could have done it, if he had thought proper. He added, 'What I did was, that God might touch the king's heart, and induce him to restore order and tranquillity to the nation. The archbishop of Paris is the sole cause of our troubles.' Having been repeatedly tortured, he was sentenced to be put to death in the same cruel manner with Ravaillac, the murderer of Henry IV.

DAMIETTA, a port-town of Egypt, on the east mouth of the Nile, four miles from the sea-coast. The present town stands upon a different site from the ancient Damietta, so repeatedly attacked by the European princes. The latter, according to Abulfeda, was 'a town surrounded by walls, and situated at the mouth of the eastern branch of the Nile.' Stephen of Byzantium informs us, that it was called Thamiatis, under the government of the Greeks of the lower empire, but that it was then very inconsiderable. It increased in importance, in proportion as Pelusium, which was frequently plundered, lost its power. The total ruin of that ancient town, occasioned the commerce of the eastern parts of the Delta to be transferred to this. It was, however, no longer a place of strength, when, about the year 238 of the Hegira, the emperors of Constantinople took possession of it a second time. The importance of a harbour, so favorably situated, opened the eyes of the caliphs. In the year 244 of the Hegira, Elmetouakkel surrounded it with strong walls. This obstacle did not prevent Roger, king of Sicily, from taking it from the Mahommedans, in the year 550 of the Hegira. He did not, however, long enjoy his conquest. Salah Eddin, who about that period mounted the throne of Egypt, expelled the Europeans from Damietta. They returned to besiege it fifteen years after; but the sultan baffled all their efforts. Notwithstanding their land army was supported by a fleet of 1200 sail, they were obliged to make a disgraceful retreat. It was the fate of this place to be often besieged. In the year 615 of the Hegira, under the reign of Eladel, the crusaders attacked it with a very considerable force. They landed on the western shore of the Nile, and their first care was to surround their camp with a ditch and pallisadoes. The mouth of the river was defended by two towers, furnished with numerous garrisons. An enormous iron chain, stretching from one side to the other, hindered the approach of vessels. The crusaders carried, by storm, the tower on the same side with their camp, broke the chain, and opened the entrance of the river for their

fleet. Nejm Eddin, the sultan's son, who was encamped near Damietta, covered it with an army. To stop the enemy's vessels, he threw a bridge over the Nile. The Franks overturned it, and the prince adopted the measure of choking up the mouth of the river, which he rendered almost impassable by several large boats he sunk there. After alternate successes, many bloody battles, and a siege of seventeen months, the Christian princes took Damietta by storm. They did not, however, long enjoy the fruit of so much blood spilt, and of an armament which had cost immense sums. Completely invested near the canal of Achmoun, by the waters of the Nile, and by the Egyptian army, they purchased their lives and their liberty by the sacrifice of their conquest. Thirty-one years after this defeat, St. Louis carried Damietta without striking a stroke. The Arabs, however, soon recovered it; but, tired of keeping a place, which continually drew upon them the most warlike nations of Europe, they totally destroyed it, and built another further up in the country. This modern Damietta, first called Menchie, as Abulfeda tells us, has preserved the memory of its origin, in a square still called by that name. Writers, in general, have confounded these two towns, ascribing to the one the attributes of the other.

The present Damietta is of a semicircular form, and stands also on the east bank of the Nile, seven miles and a-half from its mouth. It is reckoned, by Savary, to contain 80,000 souls, but this has been thought an excessive estimate. It has several squares, the most considerable of which has retained the name of Menchie. The bazaars are filled with merchants. Spacious okals, or khans, collecting under their porticos the stuffs of India, the silks of Mount Lebanon, sal ammoniac, and pyramids of rice, proclaim its commercial respectability. The houses, those in particular which are on the banks of the river, are very lofty. They have, in general, handsome saloons on the top of their terraces, open to every wind; where the Turk, reclining on a sofa, passes his life in smoking, or in looking on the sea, which bounds the horizon on one side; on the great lake that extends itself on the other; and on the Nile, which, running between them, traverses a rich country. Several large mosques, adorned with minarets, are dispersed over the town. The public baths, lined with marble, are distributed in the same manner as those of Grand Cairo, The linen is clean, and the water very pure. The heat, and the treatment in them, so far from injuring the health, serve to strengthen and improve it, if used with moderation. This custom, founded on experience, is general in Egypt. The port of Damietta is continually filled with a multitude of boats and small vessels. Those called scherm serve to convey the merchandise on board the ships in the road, and to unload them: the others carry on the coasting-trade. This town carries on a great trade with Syria, Cyprus, and Marseilles. The rice, called mezelaoui, of the finest quality in Egypt, is cultivated in the neighbouring plains. The exports of it amount, annually, to about six millions of livres. Other articles of the produce of the country are linens, sal ammoniac, corn, &c. The Christians of Aleppo and Damascus, settled in this town, have, for several ages, carried on its principal commerce. The bad state of the port is very detrimental to Damietta. The road, where the vessels lie, being exposed to every wind, the slightest gale obliges the captains to cut their cables, and take shelter in Cyprus, or stand off to sea. The tongue of land, on which Damietta is situated, straitened on one side by the river, and on the other by the western extremity of the lake Menzale, is only from two to six miles wide from east to west. It is intersected by innumerable rivulets in every direction, which render it the most fertile spot in Egypt. There are many villages around the town, in which are manufactures of the most beautiful linens. The finest napkins, in particular, are made here, fringed with silk. Damietta is 100 miles N. N. E. of Cairo.

DAMN, *v. a.*
DAMNED, *part.* & *n. s.*
DAM'NABLE, *adj.*
DAM'NABLENESS, *n. s.*
DAM'NABLY, *adv.*
DAM'NATION, *n. s.*
DAM'NATORY, *adj.*
DAM'NIFY, *v. a.*
DAM'NINGNESS, *n. s.*

Lat. *damno;* Old Fr. *damner;* which Minsheu derives from the Heb. דם, the shedding of blood in sacrifice or punishment. To condemn; and the state of being condemned, temporally or eternally. To curse; to disapprove; to explode. 'Indecently used,' also, as Johnson says, 'in a ludicrous (and trifling) sense.'

I answeride, that it is not custom to romayns, to *dampne* ony man before that he that is accused haue his accuseris present. *Wicklif. Dedis.* 25.

And not as we ben blasfemed, and as sum men seyn, that we seyn, do we yuele things that goode thingis come, whos *dampnacioun* is just. *Id. Romayss,* iii. 8.

For wel thou wost thy selven verayly
That thou and I be *damned* to prison
Perpetual; us gaineth no rainson.
Chaucer. Cant. Tales.

When now he saw himself so freshly rear,
As if late fight had nought him *dammified,*
He was dismayed, and 'gan his fate to fear.
Faerie Queene.

Not in the legions
Of horrid hell can come a devil more *damned*
In evils to top Macbeth. *Shakspeare. Macbeth.*

Let not the royal bed of Denmark be
A couch for luxury and *damned* incest. *Id. Hamlet.*

He's a creature unprepared, unmeet for death;
And to transport him in the mind he is
Were *damnable.* *Id. Measure for Measure.*

It gives him occasion of labouring with greater earnestness elsewhere, to entangle unwary minds with the snares of his *damnable* opinion. *Hooker.*

Whence *damned* vice is shrouded quite from shame,
And crowned with virtue's meed, immortal name!
Infamy dispossest of native due,
Ordained of old on looser life to sue.
Bishop Hall. Prologue to Satires.

He that hath been affrighted with the fears of hell, or remembers how often he hath been spared from an horrible *damnation,* will not be ready to strangle his brother for a trifle. *Taylor's Worthy Communicant.*

He may vow never to return to those sins which he hath had such experience of, for the emptiness and *damningness* of them, and so think himself a complete penitent. *Hammond.*

Now mince the sin,
And mollify *damnation* with a phrase:
Say you consented not to Sancho's death,
But barely not forbade it. *Dryden.*

His own impartial thought
Will *damn*, and conscience will record the fault. *Id.*

We will propose the question, whether those who hold the fundamentals of faith may deny Christ *damnably*, in respect of those consequences that arise from them? *South's Sermons.*

He, who has suffered the damage, has a right to demand in his own name, and he alone can remit, satisfaction: the *damnified* person has the power of appropriating the goods or service of the offender, by right of self-preservation. *Locke.*

Dare not
To brand the spotless virtue of my prince
With falsehoods of most base and *damned* contrivance. *Rowe.*

As he does not reckon every schism of a *damnable* nature, so he is far from closing with the new opinion of those who make it no crime. *Swift.*

The more sweets they bestowed upon them, the more *damnably* their conserves stunk. *Dennis.*

You are so good a critick, that it is the greatest happiness of the modern poets that you do not hear their works; and, next, that you are not so arrant a critick as to *damn* them, like the rest, without hearing. *Pope.*

Clouds
Rise curling fast beneath me, white and sulphury,
Like foam from the roused ocean of deep Hell,
Whose every wave breaks on a living shore,
Heaped with the *damned* like pebbles.—I am giddy. *Byron.*

DAMNII, an ancient people of Britain, who inhabited the district situated between the territories of the Selgovæ on the south, and the Caledonii on the north, now called Clydesdale.

DAMOCLES, one of the flatterers of Dionysius the elder, of Sicily. He admired the tyrant's wealth, and pronounced him the happiest man on earth. Dionysius prevailed upon him to undertake, for a while, the charge of royalty, and be convinced of the happiness which a sovereign enjoyed. Damocles ascended the throne, and while he gazed upon the wealth and splendor which surrounded him, he perceived a sword hanging over his head by a single hair. This so terrified him, that all his imaginary felicity vanished at once, and thus represented to him the danger and misery of royal state.

DAMON AND PYTHIAS, two illustrious friends of antiquity, who have immortalised their names by the strength and sincerity of their friendship. Damon was a Pythagorean philosopher, who, having incurred the displeasure of Dionysius, tyrant of Syracuse, was condemned to death. He asked a short respite, till he should settle some domestic business, of the utmost importance to his family, but which required his personal presence at some distance from Syracuse. Dionysius agreed to grant his request, upon a condition, which he supposed impossible to be complied with, viz. that Damon should find some person who was willing to suffer death in his stead, provided he did not return at the time appointed. Pythias, to the surprise of the tyrant, cheerfully surrendered himself as a pledge for his friend Daman; who, after settling his business, astonished the tyrant still more, by returning punctually at the hour fixed for his execution. Dionysius was so struck with the fidelity of these two friends, that he remitted the punishment, and entreated them to permit him to share their friendship, and enjoy their confidence.

DAMP, *v. a., n. s.* & *adj.*
DAMP'NESS, *n. s.*
DAMP'ISH, *adj.*
DAMP'ISHNESS, *n. s.*
DAMP'Y, *adj.*
} Sax. and Belg. damp; Teutonic, *dampf*. Serenius says from Scyth. *dua*, vapor. To wet, moisten, make humid; foggy, moist, or heavy air; and hence to depress, deject, make dull, discourage. Dampish, dampishness, and dampy are diminutives of the same signification.

It has been used by some with great success to make their walls thick; and to put a lay of chalk between the bricks, to take away all *dampishness*. *Bacon.*

A soft body *dampeth* the sound much more than a hard. *Id.*

Night; not now, as ere man fell,
Wholesome and cool, and mild; but with black air
Accompanied, with *damps* and dreadful gloom. *Milton.*

All these and more came flocking, but with looks
Downcast and *damp*: yet such wherein appeared
Obscure some glimpse of joy. *Id.*

Unless an age too late, or cold
Climate, or years, *damp* my intended wing
Depressed. *Id.*

The very loss of one pleasure is enough to *damp* the relish of another. *L'Estrange.*

Nor need they fear the *dampness* of the sky
Should flag their wings, and hinder them to fly;
'Twas only water thrown on sails too dry. *Dryden.*

She said no more: the trembling Trojans hear,
O'erspread with a *damp* sweat and holy fear. *Id.*

This commendable resentment against me, strikes a *damp* upon that spirit in all ranks and corporations of men. *Swift.*

Even now, while thus I stand blest in thy presence,
A secret *damp* of grief comes o'er my thoughts. *Addison.*

An eternal state he knows and confesses that he has made no provision for, that he is undone for ever: a prospect enough to cast a *damp* over his sprightliest hours. *Rogers.*

Dread of death hangs over the mere natural man, and, like the hand-writing on the wall, *damps* all his jollity. *Atterbury.*

The heat of the sun, in the hotter seasons, penetrating the exterior parts of the earth, excites those mineral exhalations in subterraneous caverns, which are called *damps*: these seldom happen but in the summer-time; when, the hotter the weather is, the more frequent are the *damps*. *Woodward.*

The lords did dispel *dampy* thoughts, which the remembrance of his uncle might raise, by applying him with exercises and disports. *Hayward.*

Cypress and ivy, weed and wall-flower grown
Matted and massed together, hillocks heaped
On what were chambers, arch crushed, column strown
In fragments, chok'd up vaults, and frescos steeped
In subterranean *damps*, where the owl peeped,
Deeming it midnight. *Byron.*

DAMPS, in natural history, from the Saxon word damp, signifying vapour, are certain noxi-

ous exhalations issuing from some parts of the earth, chiefly observed in mines and coal-pits: though vapors of the same kind often issue from old lavas of burning mountains, in those countries where volcanoes are common. In mines and coal-pits they are chiefly of two kinds, called by the miners and colliers the choke and fire-damps. The choke-damp is very much of the nature of fixed air; and usually infests those places which have been formerly worked, but long neglected, and are known to the miners by the name of wastes. The choke-damp suffocates the miners suddenly, with all the appearances found in those suffocated by fixed air. Being heavy, it descends towards the lowest parts of the workings, and thus is dangerous to the miners, who can scarcely avoid breathing it. The fire-damp, which seems chiefly to be composed of inflammable air, rises to the roof of the workings, as being specifically lighter than the common atmosphere; and hence, though it will suffocate as well as the other, it seldom proves so dangerous in this way as by its inflammable property, by which it often takes fire at the candles, and explodes with extreme violence. See COAL-MINES.

Of the formation of these damps we have as yet no certain theory; nor, though the experiments of aerologists are able to show the composition and manner of forming these noxious airs artificially, have they yet thrown much light on the method by which nature prepares them on a large scale. There are two general ways in which we may suppose this to be done; one by the stagnation of atmospherical air in old waste places of mines and coal-pits, and its conversion into these mephitic exhalations; the other by their original formation from the phlogistic or other materials found in the earth, without any interference of the atmosphere. See GAS.

DAMPIER (William), a famous navigator, descended from a respectable family in Somersetshire, and born in 1652. Losing his father when very young, he went to sea, where he soon distinguished himself. His Voyage round the World, &c. are well known, and have gone through many editions. He appears afterwards to have engaged in an expedition concerted by the merchants of Bristol to the South Sea, commanded by captain Woods Rogers; who sailed in August 1708, and returned in September 1711: but no further particulars of his life or death are recorded.

DAM'SEL, *n. s.* Goth. *damoisell;* Ital. and Span. *donzella;* i. e. a female don, from Lat. *dominus*. 'A gentlewoman, unmarried, being not a lady,' says Minsheu; and 'quasi parvus dominus, a little lord or master.' Johnson notices its having formerly been applied to both sexes, but gives no instance of it in the masculine. It is now only used in verse.

He seide go ye awey for the *damysel* is not deed but sleepith, and thei scorneden him.
Wiclif. Matthew 9.

At last she has
A *damsel* spyde slow-footing her before,
That on her shoulders sad a pot of water bore.
Spenser. Faerie Queene.

With her train of *damsels* she was gone
In shady walks, the scorching heat to shun.
Dryden.

Kneeling, I my servant's smiles implore,
And one mad *damsel* dares dispute my power.
Prior.

DAM'SON, *n. s.* Corruptly from damascene A small black plum. See DAMASCENE.

My wife desired some *damsons*,
And made me climb with danger of my life.
Shakspeare.

DAN, *n. s.* From *dominus*, as now *don* in Spain, and Ital. *donna*, from *domina*. The old term of honor for men, as we now say master. 'I know not,' says Dr. Johnson, 'that it was ever used in prose, and imagine it to have been rather of ludicrous import.' But Spenser uses it in serious praise of Chaucer, below.

Old *dan* Geffrey, in whose gentle spright
The pure well-head of poetry did dwell—
He whilst he lived was the soveraigne head
Of shepherds all. *Spenser.*

This whimpled, whining, purblind, wayward boy,
This signor Junio's giant dwarf, *dan* Cupid.
Shakspeare.

Dick, if this story pleaseth thee,
Pray thank *dan* Pope, who told it me.
Prior's Alma.

DAN, דן Heb. i. e. judgment, one of the twelve patriarchs, the fifth son of Jacob. Of his history nothing is recorded, except that he had but one son, named Hushim; though his posterity was afterwards very numerous.

DAN, or the DANITES, one of the twelve tribes of Israel, descended from the patriarch Dan. Their number, at the emigration from Egypt, amounted to 62,700, and they increased in the wilderness. After their settlement in Canaan, a party of them, who went to take Laish, in their way robbed Micah the Ephraimite of his idol, which they continued to worship till they were carried captive by Tiglath Pileser. Samson, the heroic judge of Israel, was of this tribe; and 28,600 of them attended at David's coronation. The Danites appear to have been early acquainted with commerce, for they had ships in the time of Jabin, king of the Canaanites. See Judges v. 17. Their territory extended west of Judah, and was terminated by Azotus and Dora on the Mediterranean.

DAN, in scripture geography, a city of the Danites, situated on the east side of the springs of Jordan, on the south of Mount Lebanon. It was named Laish or Leshem. Here Jeroboam established idolatry by setting up his golden calves. This city and Beersheba were the two extremities of the kingdom of Israel. Dan was taken and pillaged by Benhadad king of Syria; notwithstanding which it made some figure after the captivity. Some authors say, that it was rebuilt by Philip the tetrarch of Galilee, in our Saviour's time, and named by him Cæsarea Philippi. It lay east of Sidon and west of Damascus. It is thought by some to be the Lasha of Gen. x. 19.

DAN, in modern geography, a considerable river of the United States in North Carolina, which has been rendered navigable for boats a great way up. It unites with the Staunton in Virginia, and forms the Roanoke.

DANAE, in antiquity, a coin somewhat more than an obolus, used to be put into the mouths of the dead, to pay their passage over the river Styx.

DANAE, in fabulous history, the daughter of Acrisius, king of Argos, by Eurydice. She was confined in a brazen tower by her father, who had been told by an oracle that his daughter's son would put him to death. But Jupiter, who was enamoured of Danae, introduced himself to her bed by changing himself into a shower of gold. From his embraces Danae had a son, with whom she was exposed on the sea by her father. The wind drove the bark which carried her to the coasts of the island of Seriphus; where she was saved by some fishermen, and carried to Polydectes king of the place, whose brother, Dictys, educated the child, named Perseus, and tenderly treated the mother. Polydectes fell in love with her; but, being afraid of her son, he sent him to conquer the Gorgons, pretending that he wished Medusa's head to adorn his nuptials with Hippodamia the daughter of Œnomaus. When Perseus had victoriously finished his expedition, he retired to Argos with Danae to the house of Acrisius, whom he inadvertently killed. Virgil says that Danae after this came to Italy, and founded the city of Ardea. Some suppose that it was Prœtus, the brother of Acrisius, who introduced himself to Danae in the brazen tower; but, whoever was her seducer, the fable of the golden shower plainly implies that the keepers of the tower were bribed. Against such showers, indeed, towers of brass and bars of iron are no defence.

DANAIDES, in fabulous history, the fifty daughters of Danaus king of Argos. When their uncle Egyptus came from Egypt with his fifty sons, they were promised in marriage to their cousins; but before the celebration of their nuptials, Danaus, who had been informed by an oracle that he was to be killed by the hands of one of his sons-in-law, made his daughters solemnly promise that they would destroy their husbands. They were provided with daggers, and all except Hypermnestra proved but too obedient to their father's bloody injunctions, as a proof of which they presented him with the heads of their murdered husbands, on the morning after their nuptials. Hypermnestra was summoned to appear and answer for her disobedience in suffering her husband Lynceus to escape; but the unanimous voice of the people declared her innocent, and she dedicated a temple to the goddess of Persuasion. The forty-nine sisters were condemned, in hell, to fill with water a vessel full of holes, so that their labor was infinite and their punishment eternal.

DANAUS, in fabulous history, a son of Belus and Anchinoe, who, after his father's death, reigned conjointly with his brother Ægyptus on the throne of Egypt. Some time after a difference arose between the brothers, and Danaus set sail with his fifty daughters in quest of a settlement. He visited Rhodes, where he consecrated a statue to Minerva, and arrived safe on the coast of Peloponnesus, where he was hospitably received by Gelanor king of Argos. Gelanor had lately ascended the throne, and the first years of his reign were marked by dissensions with his subjects. Danaus took advantage of his unpopularity, and obliged him to resign the crown. The success of Danaus led the fifty sons of Ægyptus to embark for Greece. They were received with hypocritical kindness by their uncle; and soon after all murdered, except Lynceus. See DANAIDES. Danaus at first persecuted Lynceus with unremitted fury; but he was afterwards reconciled to him, and acknowledged him for his son-in-law and successor after a reign of fifty years. He began his reign about A.A.C. 1586; and after death was honored with a splendid monument in Argos, which existed in the age of Pausanias.

DANBURY, a town of the United States of America, in Connecticut, fifty-five miles N. N. E. of New York, and 116 south-west of Boston. This town was settled in 1687, and, with a great quantity of military stores, was burnt by the British on the 26th of April, 1777, but has been rebuilt since the peace. It lies thirty-three miles north-west by west of New Haven.

DANCE, *v. a., v. n.* & *n. s.* } Goth. & Belg. *dans*; Fr. *danse*; Ital. *danza*, from the Heb. דָּלַג, to leap, says Minsheu. To step, or move in measure; to dandle; a motion of one or more musically regulated: one who practises such motions is a dancer; he who teaches them a dancing-master; and a dancing-school the place where they are professedly taught. Dancing is also used for any concerted and regular motion or attendance.

DANCER,
DANCING.
DANCING-MASTER,
DANCING-SCHOOL,

But in the day of eroudis birthe, the daughtir of erodias *daunside* in the myddil and pleside eroude.
Wiclif. Matt. xiv.

Now his elder son was in the field, and, as he came and drew nigh to the house, he heard music and *dancing*. *Luke* xv.

In olde dayes of the king Artour,—
The Elf quene with hire joly compagnie
Danced ful ofte in many a grene mede.
This was the old opinion as I rede.
Chaucer. Cant. Tales.

In pestilences, the malignity of the infecting vapour *danceth* the principal spirits. *Bacon.*

The honourablest part of talk is to give the occasion, and again to moderate and pass to somewhat else; for then a man leads the *dance*. *Id.*

What say you to young Mr. Fenton? He capers, he *dances*, he has eyes of youth, he writes verses.
Shakspeare.

Thy grandsire loved thee well,
Many a time he *danced* thee on his knee. *Id.*

He at Philippi kept
His sword e'en like a *dancer*, while I strook
The lean and wrinkled Cassius. *Id.*

They bid us to the English *dancing-schools*,
And teach lavoltas high, and swift courantos;
Saying our grace is only in our heels. *Id*

Musicians and *dancers!* take some truce
With these your pleasing labours; for great use
As much weariness as perfection brings. *Donne.*

Men are sooner weary to *dance* attendance at the gates of foreign lords, than to tarry the good leisure of their own magistrates. *Raleigh's Essays.*

A certain Egyptian king endowed a *dancing-school* for the instruction of apes of quality. *L'Estrange.*

The apes were taught their apes' tricks by a *dancing-master.* *Id.*

How I loved,
Witness ye days and nights, and all ye hours,
That *danced* away with down upon your feet,
As all your business were to count my passion.
Dryden.

It upbraids you,
To let your father's friend, for three long months,
Thus *dance* attendance for a word of audience.
Id.

The legs of a *dancing-master*, and the fingers of a musician, fall, as it were, naturally, without thought or pains, into regular and admirable motions.
Locke on Understanding.

Nature, I thought, performed too mean a part,
Forming her movements to the rules of art;
And, vexed, I found that the musician's hand
Had o'er the *dancer's* mind too great command.
Prior.

Midnight shout, and revelry,
Tipsy *dance*, and jollity. *Byron.*

Nor short nor slight the sufferance, when the weight
Of frequent Sin provokes unpitying Fate;
But for brief mutiny, in frets begun,
And half forgotten e'er the *dance* is done,
Wild wanderings, more of fancy than of heart,
As light the treason, light the venging smart.
Dr. T. Brown.

DANCES, ANCIENT. There is no account of the origin of dancing among mankind. It is found to exist among the most barbarous and uncivilised nations, and is too intimately connected with the mechanism of the human body to be originally derivable from art. The Greeks were the first people, however, who reduced it to a system. At Athens, it is said, that the dance of the Eumenides, or Furies, on the theatre had so expressive a character as to strike the spectators with irresistible terror; and people imagined they saw in earnest the personified deities commissioned with the vengeance of heaven to pursue and punish their crimes. They had also martial dances, to keep up the warlike spirit of their youth. Plato reduces the dances of the ancients to three classes, viz.

1. *Domestic Dances.* Of these, some were but simply gambols, or sportive exercises, which had no character of imitation, and of which the greater part exist to this day. The others were more complex, more agreeable, figured, and were always accompanied with singing. Among the first or simple ones was the ascoliasmus; which consisted in jumping, with one foot only, on bladders filled with air or with wine, and rubbed on the outside with oil. The kybestesis was what is called in this country the Somerset. Of the second kind was that called the wine-press, of which there is a description in Longinus, and the Ionian dances.

2. *Mediatorial Dances.* These were used in expiations and sacrifices. Among the ancients there were no festivals nor religious assemblies but what were accompanied with songs and dances. They were looked upon to be so essential in these kinds of ceremonies, that to express the crime of such as were guilty of revealing the sacred mysteries, they employed the word kheistæ, 'to be out of the dance.' The most ancient of these religious dances is the Bacchic; which was not only consecrated to Bacchus, but to all the deities whose festival was celebrated with a kind of enthusiasm. The most grave and majestic was the hyporchematic; it was executed to the lyre, and accompanied with the voice.—At his return from Crete, Theseus instituted a dance at which he himself assisted, at the head of a numerous and splendid band of youth, round the altar of Apollo. The dance was composed of three parts, the strophe, the antistrophe, and the stationary. In the strophe the movements were from the right to the left; in the antistrophe from the left to the right. In the stationary they danced before the altar; so that the stationary did not mean absolute pause or rest, but only a more slow or grave movement. Plutarch is persuaded that in this dance there is a profound mystery. He thinks that by the strophe is indicated the motion of the world from east to west; by the antistrophe the motion of the planets from west to east; and, by the stationary, the stability of the earth. To this dance Theseus gave the name of geranos, or 'the crane;' because the figures which characterised it bore a resemblance to those described by cranes in their flight.

3. *Military Dances*, which tended to make the body robust, active, and well disposed for all the exercises of war. Of these there were two sorts; viz. the gymnopedic, and the pyrrhic. 1. The gymnopedic dance, or the dance of children, was invented by the Spartans for an early excitation of courage in their children, and to lead them on insensibly to the exercise of the armed dance. This dance used to be executed in the public place. It was composed of two choirs; the one of grown men, the other of children; whence, being chiefly designed for the latter, it took its name. They were both in a state of nudity. The choir of the children regulated their motions by those of the men, and all danced at the same time, singing the poems of Thales, Alcman, and Dionysodotus.

The Pyrrhic, or Enoplian dance, was performed by young men armed cap-a-pee, who executed, to the sound of the flute, all the proper movements either for attack or for defence. It was composed of four parts: 1. The podism or footing, which consisted in a quick shifting motion of the feet, such as was necessary for overtaking a flying enemy, or for getting away from him when an overmatch: 2. The xiphism was a kind of mock fight, in which the dancers imitated all the motions of combatants; aiming a stroke, darting a javelin, or dexterously dodging, parrying, or avoiding a blow or thrust. 3. The komos consisted in very high leaps or vaultings, which the dancers frequently repeated, for the better using themselves occasionally to leap over a ditch, or spring over a wall. 4. The tetracomos was the last part; this was a square figure, executed by slow and majestic movements, but it is uncertain whether it was every where executed in the same manner. Of all the Greeks, the Spartans most cultivated the Pyrrhic dance.

Athenæus relates that they had a law by which they were obliged to exercise their children at it from the age of five years. This warlike people constantly retained the custom of accompanying their dances with hymns and songs. The following was sung for the dance called trichoria, said to be instituted by Lycurgus, and which had its name from its being composed of three choirs, one of children, another of young men, and the third of old. The old men opened the dance, saying, 'In time past we were valiant.' The young men answered, 'We are so at present.' 'We shall be still more so when our time comes,' replied the chorus of children. The Spartans never danced but with real arms. In process of time, however, other nations came to use only weapons of wood on such occasions. Nay, it was only so late as the days of Athenæus, who lived in the second century, that the dancers of the Pyrrhic, instead of arms, carried only flasks, thyrsuses or reeds. But, even in Aristotle's days, they had begun to use thyrsuses instead of pikes, and lighted torches in lieu of javelins and swords. With these torches they executed a dance which was called the conflagration of the world.

Religious dances were not confined to the pagan world. They have been practised both by Jews and Christians. Among the ancient Jews, it appears to have made a part of religious worship on some occasions, as we learn from passages in the Psalms, though we do not find it enjoined as a divine precept. In the Christian churches mentioned in the New Testament, there is no account of dancing being introduced as an act of worship, though it is certain that it was used as such in after ages.

Theatrical or *stage dances.* The Greeks were the first who united the dance to their tragedies and comedies; not indeed as making part of those spectacles, but merely as an accessary. The Romans copied after the Greeks; but in the reign of Augustus they left their instructors far behind them. Two remarkable men made their appearance at that time, who invented a new species of entertainment, and carried it to a great degree of perfection. These were Pylades and Bathylus, who first introduced among the Romans what the French call the ballet d'action, wherein the performer is both actor and dancer. Pylades undertook the task of representing, with the assistance of the dance alone, strong and pathetic situations. He succeeded perhaps beyond his own expectation, and may be called the father of that style of dancing which is known to us by the name of grave or serious pantomine. Bathylus, an Alexandrian, and a freedman of Mecænas, took upon himself to represent such subjects as required a certain liveliness and agility. He was handsome in his person; and the two great scourges of Roman follies, Persius and Juvenal, speak of him as the gallant of every woman in Rome. After their death the art gradually sunk into obscurity, and became even entirely forgotten on the accession of Trajan to the empire. Thus buried with the other arts in oblivion, dancing remained uncultivated till about the fifteenth century, when ballets were revived in Italy at a magnificent entertainment given by a nobleman of Lombardy at Tortona on account of the marriage between Galeas duke of Milan and Isabella of Arragon. At first the women had no share in the public or theatrical dance; but, in 1681, we find the then dauphiness, the princess of Conti, and some other ladies of the first distinction in the court of Louis XIV. performed a ballet with the opera called Le Triomphe de l'Amour. This union of the two sexes served to enliven and render the spectacle more pleasing and far more brilliant. It was received with so much applause, that in the May of that year, when the same opera was acted in Paris at the theatre of the Palais Royal, it was thought indispensable for the success of that kind of entertainment to introduce female dancers, and they have continued ever since to be the principal support of the opera. Thus, what was at first introduced as a mere accessary to the musical performance, became in process of time its only support; and this circumstance excited the emulation of several ballet masters.

Modern dancing is so much the creature of change and fashion, that we feel it impossible to detail its ever-varying steps in a work of science. We must refer our younger readers to the professors of the art; observing, only, that it seems in itself a natural and most innocent mode of exercise and graceful motion; while, on the other hand, in crowded assemblies, among the suffocating vapors of innumerable lights and breaths, the blood becomes often unnaturally propelled to the breast and head; perspiration is dangerously checked; the lungs are expanded, and the foundation is too often laid of that fatal disease, consumption.

DANCER (Daniel), an extraordinary miser, born near Harrow, in Middlesex, in 1716, of a family who possessed a considerable estate in that county. He succeeded to the family estate in 1736. For upwards of fifty years he led the life of a hermit, having no dealings with mankind but what the sale of his hay necessarily occasioned; and was seldom seen, except when he was out gathering logs from the common, or old iron, or sheep's dung under the hedges. His house was at one time robbed, to prevent which, he fastened up the door, and, by means of a ladder, went in at an upper window, drawing the ladder carefully up after him. He had a sister who lived with him for a number of years, and who left him a considerable increase to his store, at her death; on which occasion, to put himself in decent mourning, he purchased a pair of second-hand worsted stockings. Even this was an article of luxury, for he commonly wore bands of hay around his legs. He died in 1794, and left his estates to lady Tempest, who had been very charitable to the poor man and his sister.

DANCETTE, in heraldry, an epithet applied to the bordure or ordinary, when very deeply indented, so as to make generally but three points in the breadth of the shield, as fig. 1. a fesse dancette sable, fig. 2, *azure* two bars indented *or*. *Name* James. Double dancette, fig. 3, is an epithet belonging peculiarly to the bend, as *argent* a bend double dancette, *azure*, name Henricson.

Fig. 1. Fig. 2. Fig. 3.

DAN'DELION, *n. s.* Fr. *dent de lion.* A plant of the syngenesia class. See LEONTODON.

For cowslips sweet let *dandelions* spread,
For Blouzelinda, blithsome maid, is dead.
Gay.

DANDINI (Cæsar), an historical painter, was born at Florence, and successively studied with Cavalier, Curradi, Passignano, and Christopher Allori, from whom he acquired a very pleasing manner of designing and coloring. He was extremely correct in his drawing, and finished his pictures highly. Several noble altar-pieces in the churches of Florence are of his hand; and one, which is in the chapel l'Annonciata, is particularly admired.

DANDINI (Peter), an eminent painter, born at Florence in 1646. He received his first instructions from Valerio Spada, who excelled in small drawings with a pen. He afterwards travelled through most of the cities of Italy, studying the works of those who were most distinguished; and resided long at Venice, where he copied the paintings of Titian, Tintoretto, Paul Veronese, and Correggio. When he returned to Florence the grand duke Cosmo III. kept him perpetually employed, in painting fresco, as well as in oil; his subjects being taken not only from sacred and fabulous history, but from his own fancy, which frequently furnished him with whimsical caricatures. He died in 1712.

DANDIPRAT, *n. s.*, or DODKIN, says Minsheu, 'as little among other money, as a dandiprat or dwarf among other men.' For according to Camden, Henry VII. stamped a small coin of this name. Dr. Johnson says, 'a fool.'

—— A very *dandiprat* and exceedingly deformed.
World of Wonders, 1608.

DAN'DLE, *v. a.* } Fr. *dandiner;* Teut. *tan-*
DAN'DLER, *n. s.* } *dle;* Belg. *danden*, to trifle. To fondle a child; to lull it, or dance it lightly up and down. Also to trifle away time; to delay.

And ye shall suck at the breast,
Ye shall be carried at the side,
And on the knees shall ye be *dandled.*
Isaiah lxvi. *Bishop Lowth's Translation.*

Captains do so *dandle* their doings, and dally in the service, as if they would not have the enemy subdued.
Spenser.

Courts are but superficial schools
To *dandle* fools. *Bacon.*

Their child shall be advanced,
And be received for the emperor's heir,
And let the emperor *dandle* him for his own.
Shakspeare.

Sporting the lion ramped, and in his paw
Dandled the kid. *Milton.*

Motion occasions sleep, as we find by the common use of rocking froward children in cradles, or *dandling* them in their nurses' arms. *Tillotson.*

They have put me in a silk gown, and a gaudy fool's cap; I am ashamed to be *dandled* thus, and cannot look in the glass without blushing, to see myself turned into such a little pretty master.
Addison's Guardian.

DANDOLO (Henry), doge of Venice, was born in 1108, and chosen to that office in 1192. He was nearly blind at the period of his election, but neither that circumstance, nor his age, impaired the vigor of his mind, and the events of his government became the principal causes of the greatness of his country. Dandolo induced the senate to join in the fourth crusade, but directed the first efforts of the armament to recover Zara, which had revolted from its allegiance to the republic. He accompanied the expedition to Constantinople, and, on the storming of the city, was the first who leaped on shore. After the various changes with respect to the imperial throne, which succeeded the second siege, Dandolo was nominated emperor, but in consequence of his age, and his pressing ties to Venice, the choice ultimately fell on Baldwin. But Venice, in the sharing of the imperial dominions, obtained a full moiety, and Dandolo was solemnly invested as prince of Romania. He ended his extraordinary life at Constantinople, at the age of ninety-seven.

DANDOLO (Andrew), a learned doge and historian of Venice, was born about 1310. He rose first to the office of procurator of St. Mark, and then to that of doge in 1343. Making war against the Turks with considerable success, he greatly extended Venetian commerce, and opened her trade with Egypt. Genoa becoming jealous of this trade, a powerful Genoese fleet arrived in the gulf of Venice, and caused so much anxiety to the doge, that it brought on an illness which terminated his life, September 1354. Andrew Dandolo was a correspondent of Petrarch, and to him is ascribed the compilation of the sixth book of the Venetian Laws, and a Chronicle of Venice, written in Latin, and comprehending the History of the Republic, from its commencement to 1342. It was first published by Muratori in his collection of original Italian Historians.

DANEGELT, an ancient annual tax of the Anglo-Saxons, first of 1*s.* afterwards of 2*s.* for every hide of land through the realm, and for maintaining such a number of forces as were thought sufficient to clear the British seas of Danish pirates, who then greatly annoyed our coasts. The danegelt was first imposed as a standing yearly tax on the whole nation, under king Ethelred, A. D. 991. King Stephen, on his coronation day, abrogated it for ever. No church, or church-land paid the danegelt; because, as it is said in an ancient Saxon law, the people of England placed more confidence in the prayers of the church than any military defence they could make!

DANG'ER, *v. a.*, & *n. s.* }
DANG'EROUS, *adj.* }
DANG'EROUSLY, *adv.* } Goth. *danger;* Fr. *danger;* from Latin, *damniger*, bringing or causing injury: or, says Minsheu, from δανος, death; but this seems farfetched. To put to risk, hazard, or peril; a state
DANG'ERLESS, *adj.* }
DANG'EROUSNESS, *n. s.* }

of risk or hazard. It has been used in an obsolete sense for custody, as in the old French *dangier*. See the first example.

In *danger* had he at his owen gise
The yonge girles of the diocise,
And knew hir counseil and was of hir rede
A garland hadde he sette upon his hede.
Chaucer. Prol. to Cant. Tales.

Fareth every knight thus with his wif as ye?
Is this the lawe of king Artoure's hous?
Is every knight of his thus *dangerous*?
Id. Cant. Tales.

Our craft is in *danger* to be set at nought.
Acts x. 27.

Pompey's son stands up
For the main soldier; whose quality going on,
The sides o' th' world may *danger*. *Shakspeare.*

He hath writ this to feel my affection to your honour, and to no other pretence of *danger*. *Id.*

A sort of naughty persons
Have practised *dangerously* against your state,
Dealing with witches and with conjurors. *Id.*

Wyser Raymundus, in his closet pent,
Laughs at such *daunger* and adventurement;
When halfe his lands are spent in golden smoke,
And now his second hopeful glasse is broke.
Bishop Hall's Satires. iv. 3.

It is just with God te permit those, which think they stand so surely, to fall most *dangerously*.
Hammond on Fundamentals.

More *danger* now from man alone we find,
Than from the rocks, the billows, and the wind.
Waller.

I shall not need to mind you of judging of the *dangerousness* of diseases, by the mildness of the part affected. *Boyle.*

Already we have conquered half the war,
And the less *dangerous* part is left behind. *Dryden.*

He showed no less magnanimity in *dangerless* despising, than others in *dangerous* affecting, the multiplying of kingdoms. *Sidney.*

It is *dangerous* self-flattery to give soft and smoothing names to sins in order to disguise. *Mason.*

Wealth heaped on wealth, nor truth nor safety buys,
The *dangers* gather as the treasures rise.
Johnson. Vanity of Human Wishes.

Deep in wide caves below the *dangerous* soil
Blue sulphurs flame, imprisoned waters boil. *Darwin.*

To me, Almighty, in thy mercy shining,
Life's dark and *dangerous* portals thou didst ope;
And softly on my mother's lap reclining,
Breathed through my breast the lively soul of hope.
K. White.

Thy days of health, and nights of sleep; thy toils,
By *danger* dignified, yet guiltless; hopes
Of cheerful old age and a quiet grave,
With cross and garland over its green turf,
And thy grand-children's love for epitaph;
This do I see—and then I look within— *Byron.*

DANGER, ISLES OF, three islands in the Pacific Ocean, seen by commodore Byron, in June 1765; and which he supposed to be the same with those seen by Quiros, in the beginning of the seventeenth century, and named Solomon's Islands. They were very populous, but so surrounded with rocks on all sides, that it was not safe to attempt to land. 'The islands themselves had a more fertile and beautiful appearance than any we had seen before,' says this navigator, 'and like the rest, swarmed with people, whose habitations we saw standing in clusters all along the coast. We saw also a large vessel under sail at a little distance from the shore; but to our unspeakable regret we were obliged to leave the place without further examination, for it was surrounded in every direction by rocks and breakers, which rendered the hazard more than equivalent to every advantage we might procure.' Long. 169° 28′ W., lat. 10° 15′ S.

DA'NGLE, *v. n.* } Swed. *dingla* or *dangla*,
DA'NGLER, *n. s.* } seems, as Mr. Todd sug-
DA'NGLING, *adj.* } gests, the most probable etymology; but Skinner derives it from Saxon dune, down, and hangan, hanging. To hang loose; to hang on and downwards; to follow. A dangler is a follower.

Go, bind thou up yon *dangling* apricocks.
Shakspeare.

He'd rather on a gibbit *dangle*,
Than miss his dear delight to wrangle. *Hudibras.*

Codrus had but one bed; so short, to boot,
That his short wife's short legs hung *dangling* out.
Dryden.

But have you not with thought beheld
The sword hang *dangling* o'er the shield? *Prior.*

The presbyterians, and other fanaticks that *dangle* after them, are well inclined to pull down the present establishment. *Swift.*

A *dangler* is of neither sex. *Ralph.*

In faithful memory she records the crimes
Or real, or fictitious, of the times;
Laughs at the reputations she has torn,
And holds them *dangling* at arm's length on scorn.
Cowper. Task.

DANIEL; דניאל, Heb. i. e. my judge is God; the fourth of the greater prophets, was born in Judea, of the tribe of Judah, about the thirteenth year of the reign of Josiah, A. M. 3376. He was led captive to Babylon, with other young Hebrews, after the taking of Jerusalem by Nebuchadnezzar, That prince gave them masters to instruct them in the language and sciences of the Chaldeans, and ordered them to be fed with the most delicate viands; but they desired the king's officers to allow them only pulse. The wisdom and conduct of Daniel pleasing Nebuchadnezzar, that monarch gave him several posts of honor. We need not particularise them, or the few events of his life: they are contained in the propheeies universally attributed to him. It is believed that Daniel died in Chaldea, and did not take advantage of the permission granted by Cyrus to the Jews of returning to their own country. St. Epiphanius says he died at Babylon. The prophecies of Daniel concerning the coming of the Messiah, and the other great events of after times, are so clear and explicit, that, as St. Jerome tells us, Porphyry insisted that those which related to the kings of Syria and Egypt, chap. xi., must have been written after the times of Antiochus Epiphanes; whereas this prophecy was translated into Greek 100 years before his time, and was in the hands of the Egyptians, who had no particular kindness for the Jews or their religion. Josephus says the prophecies foretelling the successes of Alexander, chap. viii. 5, xi. 3, were shown to him

by the Jews, in consequence of which they obtained several privileges from him. Antiq. lib. xi. c. 8. The style of Daniel is not so lofty and figurative as that of the other prophets; but it is more clear and concise, and his narrations and descriptions are simple and natural; in short, he writes more like a historian than a prophet. Part of his book, viz. from the fourth verse of chapter ii. to the end of chapter vii. was originally written in Chaldee, all the rest of the book is in Hebrew. The first six chapters are a history of the kings of Babylon, and what befel the Jews under their government. In the last six he is altogether prophetic, foretelling not only what should happen to his own church and nation, but events in which foreign princes and kingdoms were concerned; and some of which appear to be even yet unfulfilled.

Daniel (Gabriel), a celebrated Jesuit, and one of the best French historians, was born at Rouen in 1649. He taught polite literature, philosophy, and divinity, among the Jesuits; and was superiôr of their house at Paris, where he died in 1728. There are a great number of his works published in French, of which the principal are: 1. A History of France, of which he also wrote an abridgment, in 9 vols. 12mo. 2. A History of the French Militia, in 2 vols. 4to. 3. An Answer to the Provincial Letters. 4. A Voyage to the World of Descartes. 5. Letters on the Doctrines of the Theorists, and on Probability. 6. New Difficulties relating to the Knowledge of Brutes: and, 7. A Theological Treatise on the Efficacy of Grace.

Daniel (Samuel), an eminent poet and historian, born near Taunton in Somersetshire, in 1562, and educated at Oxford; but, leaving that University without a degree, he applied himself to English history and poetry under the patronage of the earl of Pembroke. He was afterwards tutor to the lady Ann Clifford; and, upon the death of Spencer, was created poet laureat to queen Elizabeth. In king James's reign he was appointed gentleman extraordinary, and afterwards one of the grooms of the privy chamber to the queen consort. He wrote a History of England, several dramatic pieces, and some poems, and died in 1619.

DANK, *n. s.* & *adj.* } Swed. *dunk*; Germ.
Da'nkish. } *tunck*. Skinner says, from the kindred German word *tunken*. Damp, moist, humid; or inclining to that state. Milton uses dank as a substantive.

He her the maiden sleeping found,
On the *dank* and dirty ground. *Shakspeare.*

They bound me, bore me thence,
And in a dark and *dankish* vault at home
There left me. *Id.*

Yet oft they quit
The *dank*, and rising on stiff pinions tour
The mid aereal sky. *Milton.*

Through each thicket *dank* or dry,
Like a black mist, low creeping, he held on
His midnight search. *Id.*

To wash the skins of beasts and fowls herewith, would keep them from growing *dank* in moist weather. *Grew.*

Each *dank* steam the reeking marsh exhales,
Contagious vapours, and volcanic gales. *Darwin.*

Along the leaguered wall and bristling bank,
Of the armed river, while with straggling light
The stars peep through the vapours dim and *dank*.
Byron.

DANMONII, an ancient British nation, supposed to have inhabited the tract of country now called Cornwall and Devonshire, bounded on the south by the British Ocean, on the west by St. George's Channel, on the north by the Severn Sea, and on the east by the country of the Durotriges. Some other British tribes were also seated within these limits: as the Cossini and Ostidamnii, which were probably particular clans of the Danmonii. Ptolemy names a few places, both on the sea-coasts and in the inland parts of their country, which were known to the Romans. The most considerable of these are the famous promontories of Bolerium and Ocrinium, now the Landsend and the Lizard; and the towns of Isca Danmoniorum and Tamare, now Exeter and Saltash. After the departure of the Romans kingly government was immediately revived amongst the Danmonii in the person of Vortigern.

DANTE (Aligheri), a most distinguished poet of Italy, was born at Florence in 1265, of an ancient and honorable family. Boccaccio, who lived in the same period, has left a very curious and entertaining treatise, on the life, studies, and manners of this extraordinary man; whom he regarded as his master, and for whose memory he professed the highest veneration. He relates that Dante, before he was ten years old, conceived a passion for the lady whom he has immortalised in his poems. Her age was near his own; and her name was Beatrice, the daughter of Folco Portinari, a noble citizen of Florence. The passion of Dante, however, seems to have been of the platonic kind; but on the death of his mistress, at the age of twenty-four, he fell into a deep melancholy, from which his friends endeavoured to raise him, by persuading him to marriage. He followed their advice, but unfortunately made choice of a Xantippe. The poet, not possessing the patience of Socrates, separated from her, and never afterwards admitted her to his presence. In the early part of his life he gained some credit in a military character; distinguishing himself by his bravery in an action where the Florentines obtained a signal victory over the citizens of Arezzo. He became still more eminent by the acquisition of civil honors; and at the age of thirty-five rose to be one of the chief magistrates of Florence, being elected by the suffrages of the people. Italy was at that time distracted by the contending factions of the Gibellines and the Guelphs: the latter, among whom Dante took an active part, were again divided into the Blacks and the Whites. Dante, says Gravina, exerted all his influence to unite these inferior parties; but his efforts were ineffectual, and he had the misfortune to be unjustly persecuted by those of his own faction. A powerful citizen of Florence, named Corso Donati, had taken measures to terminate these intestine broils, by introducing Charles of Valois, brother to Philip the Fair, king of France. Dante, with great vehemence, opposed this disgraceful project, and obtained the banishment of

Donati and his partizans. The exiles applied to pope Boniface VIII., and by his assistance succeeded in their design. Charles of Valois entered Florence in triumph, and those who had opposed his admission were banished in their turn. Dante took refuge at Signa, and afterwards at Arezzo, where many of his party were assembled. An attempt was made to surprise the city of Florence, by a small army which Dante is supposed to have attended; but the design miscarried, and our poet wandered to various parts of Italy, till he found a patron in the great Candella Scala, prince of Verona, whom he has celebrated. The high spirit of Dante was ill suited to courtly dependence; and he is said to have lost the favor of his Veronese patron by the rough frankness of his behaviour. From Verona he retired to France, according to Manetti; and Boccacio affirms that he disputed in the theological schools of Paris with great reputation. The election of Henry count of Luxemburgh to the empire, in November, 1308, afforded Dante a prospect of being restored to his native city, as he attached himself to the interest of the new emperor, in whose service he is supposed to have written his Latin treatise De Monarchiâ, in which he asserted the rights of the empire against the encroachments of the papacy. In 1311 he instigated Henry to lay siege to Florence; in which enterprise, however, he did not appear in person. The emperor was repulsed by the Florentines; and his death, in 1312, deprived Dante of all hope of re-establishment in Florence. After this he passed some years in Italy, in a state of poverty and distress, till he found an establishment at Ravenna, under the protection of Guido Novello da Polenta, the lord of that city, who received this illustrious exile with the most endearing liberality, continued to protect him through the few remaining years of his life, and extended his munificence to his ashes. Eloquence was one of the many talents which Dante eminently possessed, and on this account he was employed on fourteen different embassies. Guido sent him to negociate a peace with the Venetians, who were preparing to attack Ravenna. Manetti asserts that he was unable to procure a public audience at Venice, and returned to Ravenna by land, from his apprehensions of the Venetian fleet; when the fatigue of his journey, and the mortification of failing in the attempt to preserve his patron from the impending danger, threw him into a fever, which terminated in death on the 14th of September, 1321. He died in the palace of his friend; and the affectionate Guido paid the most tender regard to his memory. He commanded the body to be adorned with ornaments, and after being carried on a bier through the streets of Ravenna, by the most illustrious citizens, to be deposited in a marble coffin. He himself pronounced the funeral oration, and expressed his design of erecting a splendid monument in honor of the deceased: a design which his subsequent misfortunes rendered him unable to accomplish. This was afterwards done by Bernard Bembo, the father of the cardinal of that name. Boccacio asserts that Dante began his Inferno, the work which has immortalised his name, and finished seven cantos of it before his exile; that in the plunder of his house, on that event, the beginning of his poem was fortunately preserved, but remained for some time neglected, till its merit being accidentally discovered by an intelligent poet named Dino, it was sent to the marquis Malespina, an Italian nobleman, by whom Dante was then protected The marquis restored these papers to the poet, and intreated him to proceed in the work. To this incident we are probably indebted for this celebrated poem, which Dante must have continued under all the disadvantages of an unfortunate and agitated life. It does not appear at what time he completed it; perhaps before he quitted Verona, as he dedicated the Paradise to his Veronese patron. The very high estimation in which this production was held by his countrymen, appears from a singular institution in the republic of Florence; which, in 1373, assigned a public stipend to a person appointed to read lectures on it. The critical dissertations that have been written on Dante are almost as numerous as those to which Homer has given birth; the Italian, like the Grecian bard, having been the subject of the highest panegyric, and of the grossest invective. Voltaire has spoken of him with that precipitate vivacity which so frequently led him to insult the reputation of the best writers. But more temperate and candid critics have sufficiently vindicated his claims as an original and most captivating poet. There are many valuable editions of his works, among which it will be sufficient to specify those of Conte Zapato, Venice, 1757, 3 vols. 4to.; and Parma, Bodoni, 1796, 3 vols. folio. There is an English translation of his Comedia by the Rev. H. Boyd; and another and much better by the Rev. H. F. Carey of Chiswick.

DANTON (George James), a celebrated French politician, who took an active part, during the French revolution, in erecting those bloody tribunals, and establishing that despotic power, to which he himself fell a victim. He was born at Arcis sur l'Aube, in 1760; was bred to the law, and became an advocate: with regard to religious opinions, he openly avowed himself an atheist; and, in politics, he was a decided republican: but having differed with Robespierre he was accused of monarchical opinions, and, being condemned by the revolutionary tribunal, was guillotined with eight other deputies at Paris on the 5th of April, 1794, in the thirty-fourth year of his age.

DANTZIC, or DANTZIG, the capital of West Prussia, is seated on a branch of the Vistula, about five miles above its embouchure into the Baltic. This city is famous in history on several accounts, particularly as having been formerly at the head of the Hanse towns. It is large, beautiful, populous, and rich; its houses being generally five stories high, and many of its streets planted. It is traversed by two branches of the Vistula, and consists properly of three towns: the Vorstadt, or Fore-town; the Aldstadt, or Old-town; and the Rechstadt. The suburbs, called Old and New Scotland, are the best built parts of the place; and the Scotch have considerable privileges here, in consequence, as they tell us, of their gallant defence of the town under one of the family of Douglas, when it was besieged by the

Poles. In the time of king Charles II. there were about 53,000 of that nation in the neighbourhood, and Sir John Denham and Mr. Killigrew were sent to tax them by the poll, with the king of Poland's licence; which having obtained, they brought home £10,000 sterling, besides their charges in the journey.

Dantzic has a noble harbour; and is still an eminent commercial city, although it seems to have past its meridian: which it enjoyed probably about the time that the president De Thou wrote his Historia sui Temporis, in which he speaks so highly of its commerce and grandeur. It was then a republic, claiming a small adjacent territory, about forty miles round, under the protection of the king and republic of Poland. Its magistracy and the majority of its inhabitants are Lutherans; although other religious professions are tolerated. It has twenty-six parishes, with many convents and hospitals; and contains four dock-yards for building merchantmen. It has an annual fair, called the fair of St. Dominic, which begins on the 5th of August. Accounts are kept in florins, the value of which is much less than that of Holland or Germany, being not quite equal to 9½*d.* sterling. The chief public buildings are the cathedral, the church of St. Catherine, the Jesuits' college, the town-house, the arsenal, and the court of the nobles. The inhabitants were once computed to amount to 200,000; but later computations, and its memorable connexion with the late continental wars, have reduced them to little above 40,000 or 45,000.

The road, or gulf of Dantzic consists of an arm of the sea, sheltered from north winds by a tongue of land on which stands the small town of Hela. Its own shipping is numerous, but the foreign ships constantly resorting to it are more so: of these the British are the most in number, particularly when our corn laws admit of the importation of that commodity; Poland being the greatest magazine for corn in all Europe, and Dantzic the principal port for its exportation. Besides which, Dantzic exports considerable quantities of naval stores, potash, linen, and amber. The value of these, and still more that of corn, is of course fluctuating, but £1,500,000 sterling is considered a fair average of the annual value of its exports. See our article Corn Laws. It imports, from various parts of Europe, wine, oil, groceries, woollens, silk, iron, copper, lead, skins, and furs.

Dr. Busching affirms that, as early as the year 997, Dantzic was a considerable commercial city. The inhabitants have often changed their masters, and have been under the protection of the English, Dutch, French, and Prussians in succession. The city is surrounded with ramparts which mount upwards of 100 brass cannon; and although it could not, through its situation, stand a long siege, by the facility it possesses of inundating the neighbourhood it has offered, as in 1807, an effectual resistance to assailants. In 1734 the inhabitants discovered a remarkable attachment and fidelity towards Stanislaus, king of Poland, not only when his enemies the Russians were at their gates, but even in possession of the city. This city was exempted by Frederick the Great, king of Prussia, from those claims which he made on the neighbouring countries; notwithstanding which, Frederick William II., his successor, seized its territories, under pretence of their having been formerly part of Polish Prussia, and possessed himself of the port-duties. In 1784 it was blockaded by his troops, on various pretences; but by the interposition of the empress of Russia, and the king of Poland, they were withdrawn; and, a compromise having taken place, the city was restored to its former immunities. In 1793 the king of Prussia seized on the city itself with the remainder of the province, which he added to his dominions. Its internal government, however, was undisturbed; and thus it remained until 1807, when the French entered it after a long siege, and held it until the peace of 1814, when it returned to Prussia. It was blockaded for a great length of time previously, and ably, though not very humanely, defended by general Rapp. The German is the language in common use here. Dantzic is sixty-eight miles W.S.W. of Konigsberg, thirty south-east of Marienburg, and 235 north-east of Berlin.

DANUBE, the largest and most considerable river in Europe, rising in the Black Forest, near Zunberg, and running north-east through Suabia, by Ulm the capital of that country, then running east through Austria, it passes by Ratisbon, Passau, Ens. and Vienna. It then enters Hungary, and runs south-east from Presburg to Buda, and so on to Belgrade; after which it divides Bulgaria from Morlachia and Moldavia, discharging itself by several channels into the Black Sea, in the province of Bessarabia. Towards the mouth it was called, by the ancients, the Ister; and it is now said that four of the mouths are choked up with sand, and that there are only two remaining. It receives sixty rivers, great and small, in its course; and runs near to, or washes the following cities and towns:—Eschingen, Ulm (where it begins to be navigable), Donawert, Neuburg, Ingoldstadt, Passau, Linz, Ips, Stein, Vienna, Presburg, Raab or Javarin, Comorn, Waitzen, Pest, Buda, Belgrade, &c. &c. It is so deep between Buda and Belgrade, that both the Turks and Christians have had men of war upon it; and yet it is not navigable to the Black Sea, on account of the cataracts. The Danube was generally supposed to be the northern boundary of the Roman empire in Europe. It was worshipped as a deity by the Scythians. It abounds in fish, and particularly in a large kind of sturgeon.

Danube, Circle of the Upper, one of the chief divisions of the kingdom of Bavaria. It has on its frontiers the circles of the Rezat, the Regen, and the Iser; Tyrol, the lake of Constance, and Wirtemberg. It contains 4350 square miles, and 470,000 inhabitants, mostly Catholics. The capital is Eichstadt, and the other chief towns are, Neuburg, Nordlingen, Dillingen, Gunzburg, Hochstadt, Pappenheim, Donauwerth, and Ingoldstadt. The surface is in general hilly, diversified with forests and lakes, particularly in the direction of the Suabian Alps: and, besides the Danube, it is watered by the Iller and the Lech. In the low country, corn, hemp, and flax abound,

but the majority of the peasantry rear cattle. Iron, coal, and copper, are the mineral productions, and in the towns the manufacture of paper and linen is carried on.

DANUBE, CIRCLE OF THE LOWER, another circle of Bavaria, consists of the greater part of Lower Bavaria Proper, and the principality of Passau. It borders on Bohemia, Upper Austria, and the circles of the Iser and Regen. Its area is 4335 square miles, and its inhabitants amount to 396,150. The surface is an alternate succession of mountains, valleys, and plains. It is also traversed by the Inn, the Ilz, and the Iser. The climate is mild except in the north-west; and the tracts on the south side of the Danube are so fertile in corn as to be accounted the granary of Bavaria: they have besides an excellent breed of horses. The chief productions are corn, flax, and hemp. In the larger towns there are manufactures of linen and other cloths, which, together with the natural productions, produce a brisk trade in the Danube, the Iser, and the Inn. The capital is Passau.

DANVERS, a township of Massachusetts, in Essex county, adjoining Salem on the north-west, in which it was formerly comprehended by the name of Salem village. It consists of two parishes, and was incorporated in 1757.

DANVILLE, a post town of the United States, in Kentucky, situated in a large fertile plain on Dick's River. It consists of about eighty houses. Thirty-five miles S.S.W. of Lexington, and 830 from Philadelphia.—Also a township in Vermont.

DAP, or DAPE, *v. n.*, probably the same with DAB, which see. Dr. Johnson says it is a corruption of dip.

I have taught him how to catch a chub by *dapping* with a grasshopper. *Walton.*

DAPAT'ICAL, *adj.* Lat. *dapiteus*, sumptuous. *Bailey.*

DAPHNE, in ancient geography, a small district on the lake Samachonites, in the Higher Galilee, very pleasant, and plentifully watered with springs, which feed the Lesser Jordan, whence its name seems to arise, probably in imitation of that near Antioch.

DAPHNE, in botany, spurge laurel; a genus of the monogynia order and octandria class of plants; natural order thirty-first, vepreculæ: CAL. none: COR. quadrifid and marcescent, enclosing the stamina: FRUIT a monospermous berry. Species thirty, of which the following are the most remarkable.—

1. D. gnidium, the flax-leaved daphne, is a low deciduous shrub: native of Italy, Spain, and about Montpelier. This species seldom grows higher than three feet. The branches are very slender, and ornamented with narrow, spear-shaped, pointed leaves, much like those of the common flax. The flowers are produced in panicles at the ends of the branches: they are small, come out in June, but are rarely succeeded by seeds in England.

2. D. laureola, the spurge laurel or evergreen daphne; a low evergreen shrub, common in some parts of this kingdom, also in Switzerland and France. This shrub seldom grows more than a yard or four feet high: it sends out many branches from the bottom, and these are covered with a smooth light-brown bark that is very thick. The leaves sit close to the branches, and are produced in such plenty, that they have the appearance, at a small distance, of clusters at the end of the branches. They are spear-shaped, shining, smooth, and thick; their edges are entire. These leaves, when growing under the drip of trees, spread open, and exhibit their green color, pure, and untarnished: when planted singly, in exposed places, they naturally turn back with a kind of twist, and the natural green of the leaf is often alloyed with a brown tinge. This shrub is also valuable on account of the fragrance of its flowers; it blows the beginning of January, and will continue until the middle or latter end of April before the flower falls off. They make but little show; being small, and of a greenish yellow. They are succeeded by oval berries, which are first green, and afterwards black when ripe.

3. D. mezereum, the mezereon, or spurge olive, is a low deciduous shrub. It is a native of Germany, and has also been discovered in some woods near Andover in Hampshire. Of this elegant plant there are four varieties: 1. The white; 2. The pale red; 3. The crimson; and 4. The purple flowering. They are of low growth, seldom arising to more than three or four feet in height, and, therefore, are proper even for the smallest gardens. They will be in bloom in February, nay, sometimes in January, when few trees, especially of the shrubby tribe, present their honors. Each twig has the appearance of a spike of flowers of the most consummate lustre; and, whether beheld near or at a distance, it has a most enchanting appearance, and the air is perfumed with their odors to a considerable distance. Besides the beauty of the leaves, which come out after the flowers are fallen, and which are of a pleasant green color and an oblong figure, it will be full of red berries in June, which continue growing till the autumn. The root of the mezereon was long used in the Lisbon diet-drink, a remedy said to be good for several complaints, particularly nodes and other symptoms resisting the use of mercury. The composition of this diet-drink is described in the Edinburgh Physical Essays, by Dr. Donald Monro. On chewing the root it proves very pungent, and its acrimony is accumulated about the fauces, and is very durable. It is employed chiefly under the form of decoction; and enters the decoctum sarsaparillæ compositum of the London college; but it has also been used in powder combined with some inactive one, as that of liquorice root. It is often usefully combined with mercury. The bark of the root, which is the most acrimonious part, is recommended, in the Pharmacopœia Chirurgica, to be steeped in vinegar, and applied to promote the discharge of issues. Mezereon has also been of use in tumors and cutaneous eruptions. The whole plant is very corrosive; and six of the berries, it is said, will kill a wolf. A woman gave twelve grains of the berries to her daughter who had a quartan ague; she vomited blood, and died immediately.

4. D. villosa, the hairy-leaved daphne, a low deciduous shrub; native of Spain and Portugal.

The stalks are ligneous, about two feet high, and send forth branches alternately from the sides. The leaves are spear-shaped, plane, hairy on both sides, and grow on very short foot-stalks. The flowers have very narrow tubes, are small, and make no great show; they come out in June, and are not succeeded by ripe seeds in England. This shrub, in some situations, retains its leaves all winter in such beauty as to cause it to be ranked among the low-growing evergreens; but in others it is sometimes shattered with the first black winds.

DAPHNE, in the Pagan mythology, daughter of the river Peneus by the goddess Terra, of whom Apollo became enamoured. This passion had been raised by Cupid; with whom Apollo, proud of his late conquest of the serpent Python, had disputed the power of his darts. Daphne heard with horror his addresses, and endeavoured to avoid his importunity by flight. Apollo pursued her, and Daphne intreated the assistance of the gods, who changed her into a laurel. Apollo crowned his head with the leaves of the laurel, and ordered that that tree should be for ever sacred to his divinity.

DAPHNE, a daughter of Tiresias, priestess in the temple of Delphi. She was consecrated to the service of Apollo by the Epigoni, or according to others by the goddess Tellus. She was called Sibyl on account of the wildness of her looks and expressions when she delivered oracles. Her oracles were generally in verse; and Homer, according to some, has introduced much of her poetry in his compositions.

DAPHNEPHORIA, a festival in honor of Apollo, celebrated every ninth year by the Bœotians. It was then usual to adorn an olive bough with garlands of laurel and other flowers, and place on the top a brazen globe, on which were suspended smaller ones. In the middle were placed a number of crowns and a globe of inferior size, and the bottom was adorned with a saffron-colored garment. The globe on the top represented the sun or Apollo. That in the middle was an emblem of the moon, and the other of the stars. The crowns, which were 365 in number, represented the sun's annual revolution. This bough was carried in solemn procession by a beautiful youth of an illustrious family, and whose parents were both living. He was called δαφνηφορος, daphnephorus, laurel-bearer; and at the time executed the office of priest of Apollo. Behind him followed a train of virgins with branches in their hands. In this order the procession advanced as far as the temple of Apollo Ismenius, where supplicatory hymns were sung to the gods.

DAPHNIN, in chemistry, the bitter principle of the laurel, first discovered by M. Vauquelin. From the alcoholic infusion of this bark the resin was separated by its concentration. On diluting the tincture with water, filtering, and adding acetate of lead, a yellow daphnate of lead fell, from which sulphureted hydrogen separated the lead, and left the daphnin in small transparent crystals. They are hard, of a grayish color, a bitter taste when heated, evaporate in acrid acid vapors, sparingly soluble in cold, but moderately in boiling water.

DAP'IFER, *n. s.* Lat. and Old Fr. *dapifer*; a dish carrier: formerly an officer of considerable rank at our coronations, and those of the kings of France. See CORONATION.

In France the barons and great men gave in like manner their attendance at the king's court. Such were the *dapifer*, butler, chamberlain, constable, chancellor, and others. *Madox's Hist. of the Exchequ.*

DAP'PER, *adj.* } Belg. *dapper*; Teut.
DAP'PERLING, *n. s.* } *tappir*; which signify brave, valiant; and therefore Dr. Johnson thinks this word is generally applied in contempt. But Minsheu suggests its possible derivation from dapifer (see above), and well defines it, neat; spruce; dainty. Dapperling is a diminutive of dapper.

The *dapper* ditteis that I won't devise
To please youths' fancy.
Spenser. Shepherd's Calender.

And on the tawny sands and shelves,
Trip the pert fairies and the *dapper* elves. *Milton.*

A pert *dapper* spark of a magpie fancied the birds would never be governed till himself should sit at the helm. *L'Estrange.*

DAP'PLE, *v. a.* & *adj.*, from apple, as *pommelé* in the French. To variegate; to streak with different colors: that which is so streaked or variegated.

Horses that are *dappled* turn white; and old squirrels turn grisly. *Bacon.*

But under him a grey steed did he wield,
Whose sides with *dappled* circles were endight.
Spenser.

The gentle day
Dapples the drowsy east with spots of grey.
Shakspeare.

Come, shall we go and kill us venison?
And yet it irks me the poor *dappled* fools,
Being native burghers of this desert city,
Should, in their own confines, with forked heads,
Have their round haunches gored. *Id.*

The lark begins his flight,
From his watch-tower in the skies,
Till the *dappled* dawn doth rise. *Milton.*

The *dappled* pink, and blushing rose,
Deck my charming Chloe's hair. *Prior*

The gods, to curse Pamela with her prayers,
Gave the gilt coach and *dappled* Flanders mares.
Pope.

DAR, DART, or DACE, *n. s.*, a fish. See DACE.

DARABJIRB, or DARAB-GUIERD, a town of Persia, in the province of Kerman, surrounded by groves of lemon and orange trees, yielding such abundance of fruit that the juice is exported to every part of Persia. It is watered by a copious stream. A considerable portion of the town is in ruins, but it contains a population of 10,000 or 15,000, and was formerly very celebrated, being supposed to have been founded by the Darius Nothus of ancient historians. It was invested by Lootf Ali Khan, in the year 1794, but he was compelled to relinquish the siege. Distant 150 miles north-east of Schiras.

DARAH, or DRAS, a country of Northern Africa, bounded on the north by Morocco, Gezula, and Tafilet, on the east and the south by the Great Desert, and on the west by Suz. It takes its name from the river Darah, or Dras, which

passes through it, and is absorbed in the desert. The principal produce is indigo and dates. The inhabitants are Arabians and Mahommedans, and some of the districts of the country are dependencies of Morocco. It contains a superior breed of goats. Copper and antimony are found in the mountains, and in the southern part, at Atta and Takka, are places of rendezvous for the great caravan which passes to Timbuctoo from Morocco.

DARANTASIA, in ancient geography, a town of the Centrones, in Gallia Narbonensis, between Lemincum and Augusta Prætoria, called Forum Claudii by the Romans. It is now called Moûtiers.

DARAPTI, among logicians, one of the modes of syllogisms of the third figure, whose premises are universal affirmatives, and the conclusion is a particular affirmative: thus,

DAR Every body is divisible;
AP- Every body is a substance;
TI. Therefore, some substance is divisible.

DARCET (John), a French physician and chemist, was born in 1725, at Douazit in Guienne. Being discarded by his father, who was a magistrate, for preferring the study of medicine to the profession of the law, he was obliged, while pursuing his studies, to teach Latin for his support, at Bourdeaux. Here he became acquainted with Montesquieu, with whom he went to Paris in 1742; remaining with him as a literary assistant till his death. He afterwards went with the duke de Lauraguais into Germany, and had an opportunity of critically examining the Hartz mines, in Hanover. At the peace he applied himself to technical chemistry, and the improvement of the porcelain manufacture, respecting which he drew up several memoirs presented to the Academy of Sciences in 1766 and 1768. He also demonstrated, about this time, the combustibility of the diamond; on which subject he addressed the academy in 1770. In 1762 he was made regent of the Faculty of Medicine at Paris; in 1771 he married the daughter of the chemist Rouelle; and in 1774 travelled over the Pyrenees, to study the geology of those mountains. He succeeded Macquer as a member of the Academy of Sciences, and director of the manufactory of Sevres, and became afterwards inspector-general of the assay of coins, and of the gobelin manufactory. His valuable life was preserved during the reign of terror, by Fourcroy, who procured the obliteration of his name from Robespierre's list; and he died in 1801, a member of the Institute, and of the conservative Senate.

DARDANELLES, two ancient and strong castles of Turkey, one of which is in Romania, and the other in Natolia, on each side of the ancient Hellespont, now the strait of Gallipoli, which opens a communication between the Archipelago, and the Propontis, or sea of Marmora. The mouth of the canal is four and a half miles over; and the castles which were built in 1659, to secure the Turkish fleet from the insults of the Venetians, are defended on each side by fourteen brass guns with chambers like mortars, to receive granite balls. They are twenty-two feet long, from twenty-five to twenty-eight inches diameter in the bore, and lie on a paved terrace near the level of the water. They are called the Old Dardanelles, to distinguish them from two others built at the entrance of the strait, about ten miles to the south-west, one of which stands in like manner in Asia, and the other in Europe, and called the New Dardanelles. The ships that come from Constantinople are searched at the castle on the side of Natolia. The passage betwixt both these pairs of castles was forced by a British fleet under admiral Duckworth, in February, 1807.

DARDANIA, in ancient geography, 1. A district of Mœsia Superior on the south, now the south part of Servia, towards the confines of Macedonia and Illyricum. 2. A small district of Troas, along the Hellespont. 3. The ancient name of Samothracia; from Dardanus, who removed thither.

DARDANUS, a son of Jupiter and Electra, who, after the death of his brother Jason, left Samothrace, his native country, and passed into Asia Minor, where he married Batia, the daughter of Teucer king of Teucria. After the death of his father-in-law, he reigned sixty-two years. He built the city of Dardania, and was reckoned the founder of the kingdom of Troy. He was succeeded by Erichthonius. According to some, Corybas, his nephew, accompanied him to Teucria, where he introduced the worship of Cybele. Dardanus taught his subjects to worship Minerva, and he gave them two statues of the goddess, one of which is well known by the name of Palladium. According to Virgil, Dardanus was originally an Italian.

DARE, *v. a., v. n.* & *n. s.*
DAREFUL, *adj.*
DARING, *adj.* & *n. s.*
DARINGLY, *adv.*
DARINGNESS, *n. s.*
} Sax. dearren, Belg. and Teut. *darren*; Lat. *audere*; probably from the Greek θαρρειν, to adventure. To be confident; to be prepared or bold for any purpose; to challenge; to defy. In Shakspeare only do we find dare used as a substantive. In Beaumont and Fletcher's Maid Tragedy, it is used for affrighting or amazing: and this seems to be the meaning in the phrase, to dare a lark or bird.

Dar ony of ghou that hath a cause aghens a nothir be demed at wicked men, and not at hooli men?
Wicklif. 1 *Cor.* vi.

She was so propre, and swete, and likerous,
I *dare* well sain if she had ben a mous
And he a cat he wolde hire hente anon
Chaucer. Cant. Tales.

'Ah! dame,' quoth he, 'thou temptest me in vaine
To *dare* the thing which daily yet I rew;
And the old cause of my continued paine
With like attempt to like end to renew.'
Spenser. Faerie Queene.

I *dare* do all that may become a man;
Who *dares* do more, is none. *Shakspeare.*

Sextus Pompeius
Hath given the *dare* to Cæsar, and commands
The empire of the sea. *Id.*

We might have met them *dareful*, beard to beard,
And beat them backward home. *Id.*

Shrimps are dipped up in shallow water with little round nets, not much unlike that which is used for *daring* larks. *Carew.*

Dare to be true! Nothing can need a lie,—
The fault that needs it must grow two thereby.
Herbert.

He had many days come half seas over; and sometimes passing further, came and lay at the mouth of the harbour, *daring* them to fight. *Knolles.*

Time! I *dare* thee to discover
Such a youth, and such a lover. *Dryden.*

As larks lie *dared* to shun the hobby's flight. *Id.*

Masters of the arts of policy thought that they might even defy and *dare* Providence to the face. *South.*

The song too *daring*, and the theme too great. *Prior.*

The last Georgick has many metaphors, but not so *daring* as this: for human passions may be more naturally ascribed to a bee than to an inanimate plant. *Addison.*

Some of the great principles of religion are every day openly and *daringly* attacked from the press. *Atterbury.*

Your brother, fired with his success,
Too *daringly* upon the foe did press. *Halifax.*

Grieve not, O *daring* prince, that noble heart. *Pope.*

He turned not—spoke not—sunk not—fixed his look,
And set the anxious frame that lately shook:
He gazed—how long we gaze despite of pain,
And know, but *dare* not own, we gaze in vain!
Byron.

But with the breath which fills
Their mountain-pipe, so fill the mountaineers
With the fierce native *daring* which instils
The stirring memory of a thousand years,
And Evan's, Donald's fame rings in each clansman's ears! *Id.*

On that warm sod, uncrossed by wanderer's path,
Some youthful blushing sweetness *dares* the bath;
Half bold, half trembling, her last vesture thrown,
Safe from all eyes, yet shrinking from her own.
Dr. T. Brown.

DARES, a Phrygian, who lived during the Trojan war, in which he was engaged, and of which he wrote the history in Greek. This history was extant in the time of Ælian; the Latin translation, now extant, is universally believed to be spurious, though it is attributed by some to Cornelius Nepos. This translation first made its appearance A. D. 1477, at Milan. Homer mentions Dares, Iliad, lib. v., ver. 10, & 27.

DARFUR, Darfoor, or Fur, a large kingdom of Central Africa, between Abyssinia and Bornou. We are indebted for all our knowledge of it to Mr. Browne, who resided here from 1793 to 1796. According to this writer it is bounded on the east by Kordofan, and the country of the Shilluks, which separates it from Sennaar and Abyssinia; on the west by Bergoo, which divides it from Begherme and Bornou; while the regions to the south are occupied by barbarous nations, extending to, and inhabiting the Mountains of the Moon, and the rise of the Bahr-el-Abiad. It does not seem to contain any great river or lake; during the dry season, therefore, all nature wears a parched and barren appearance; but the rainy season begins in June and continues till September. This is the sowing season, and the king, with his attendants, goes out into the fields, and makes, with his own hand, the first holes in the ground. Water and vegetation are now most abundant. In the south the tamarind, plane, and sycamore are found. The heglig and the nebbek, having very hard wood, are two species peculiar to Darfur. A kind of bean and pea, used not for food but for being strung in beads, seems also indigenous here. Other plants largely produced are the mimosa nilotica, yielding a gum which is carried into Egypt; the water melon, the gourd, Cayenne pepper, hemp, and tobacco. But a small quantity of wheat is raised; the principal grains are the dokn, a species of millet, and another species of larger size, called the kassob. The harvest is conducted by women and slaves, who break off the ears with their hands, and carry it away in baskets; while the straw is left standing. The grain being threshed, is buried in the earth to preserve it. It is ground and boiled for food, and eaten either with milk or the juice of a particular kind of herb, which has a bitter and slightly acid taste.

The wild animals are the lion, hyena, leopard, wild buffalo, wolf, and jackall: herds of the jackall and hyena are said to enter the villages at night. Here are also found the rhinoceros, the elephant, the camelopardalis, the hippopotamus, and the crocodile; and still more abundantly the invaluable camel. The horses, asses, and sheep are inferior, but goats and horned cattle are numerous, and their flesh very good.

Gold is plentiful both to the east and west, and very fine copper is brought from the south. The rocks consist chiefly of gray granite; containing alabaster, various kinds of marble, sulphur, and fossil salt.

The houses are built of clay, with a coating of plaster; the roofs being flat, and formed of light beams of wood, with a clay covering. A house containing two dongas, the apartment for the stowage of property, two knournacs and two sukteias, both sleeping and sitting rooms, is considered fit for the accommodation of persons of supreme rank.

Mr. Browne did not conceive that the population could be more than 200,000 souls. Cobbe, the capital, contains about 6000; our traveller heard only of eight other considerable places, Sweini, Kourma, Cubcabia, Ril, Cours, Shoba, Gidid, and Gelle; although a native of the country named to Dr. Seetzen more than fifty. The capital is wholly occupied by foreign merchants, from Egypt and the eastern countries of Dongola, Kordofan, and Sennaar. Other great towns abound also with Arabs and other foreigners

On the death of the monarch, the crown, which is perfectly despotic, descends to the eldest son; or is seized by any stronger or more popular member of the royal family. The military have, in this case, the chief influence, and are always much courted. The usual residence of the sultan is at a village near Cobbe, called El Fasher. Mr. Browne, being admitted to an audience of state, found the monarch seated on his throne, under a lofty canopy, composed

of various stuffs of Syrian and Indian fabric, hung loosely on a light frame of wood, and spread with small Turkey carpets. The ministers, or meleks, were seated at some distance on the right and left, and behind them was a line of guards, bearing a spear and target, with caps, in which a black ostrich feather was stuck. The ground in front was filled with spectators and petitioners, to the number of 1500. On the monarch's left hand stood a person whose employment was to sound his praises, and who vociferated continually, 'See the buffaloe, the offspring of a buffaloe, a bull of bulls, the elephant of superior strength, the powerful sultan Abd-el-rach-man-el-rashid.' His revenue is derived from various sources, and often collected by troops who march through the territory, and seize the cattle until it is paid. The king is also an extensive merchant, exporting and importing every year a large quantity of goods on his own account.

The religion of Mahomet is professed universally and zealously. But the people are cheerful in their dispositions; and the females not immured, nor, unless in the case of the great, are their faces veiled. A fermented liquor called merise, the same with the bouza of the negroes, is universally indulged in, however, and by both sexes. The men sometimes sit whole days over it. The intercourse of the sexes is extremely licentious, and polygamy has no bounds. The Furians are also considered as by no means conspicuous for honor or even honesty. No property is found to be safe out of the sight of the owner.

The grand intercourse of Darfur is with Egypt, and is carried on entirely by caravans, whose motions from Fur are, however, extremely uncertain, and sometimes two or even three years elapse without one. The caravan going to Egypt is much larger than the one returning, and often consists of 2000 camels. The water is carried in goat-skins or ox-hides, artificially covered to prevent evaporation, and every tenth camel is loaded with straw and beans. Among the articles sent to Egypt, the most important are slaves, taken in the negro countries of the south; ivory, the horns, teeth, and hide of the rhinoceros, the hippopotamus, and the camel. The imports comprise beads of all sorts, toys, glass, arms, light cloths, Barbary caps, carpets, silks, shoes, and writing-paper in large quantities. Commerce is transacted entirely by barter. There is also a considerable intercourse with Mecca, which takes the route by Suakem and Jidda, as much shorter than that by Egypt.

DARIC, in antiquity, a famous gold coin, first struck by Darius the Mede, about A.A.C. 538; probably during his stay at Babylon. From thence the darics were dispersed over the east, and into Greece; where they were also called stateres, and were the gold coins best known in Athens in ancient times. According to Dr. Bernard, the daric weighed two grains more than our guinea. Plutarch says, they bore on one side an archer clothed in a long robe, and crowned with a spiked crown, holding a bow in his left hand, and an arrow in his right; and on the other side the effigies of Darius. There were afterwards half darics.

DARIEN, or Terra Firma Proper, once the northern division of Terra Firma, or Castile del Oro, is now a province of Colombia, and is bounded on the north by the Spanish Main, or Caribbean Sea; on the east by Carthagena; on the west by Panama; and on the south by the Pacific Ocean, and the province of Choco. Darien is one of the largest provinces of Tierra Firme: It is about 200 miles long, and eighty broad.

The Gulf of Darien, which is the mouth of the Rio Atrato, or rather a large arm of the Atlantic, is the most important part of the northern coast, and contains several islands of considerable size. The rivers are very large, but few of them navigable, owing to the shoals, bars, and rapids, in which they abound; most of them, however, yield grains of gold.

The province of Darien is thinly inhabited, and almost wholly by native tribes, who amount perhaps to 30,000; the unhealthiness of the climate and the impenetrable forests preventing the formation of European settlements. The valleys are so marshy, from the overflowing of the rivers, that the natives generally build their habitations in the branches of high trees.

The chief products are cotton and tobacco. The mouth of the Atrato, though wide, has many shoals; yet it serves to export much of the internal produce of the neighbouring provinces, and is a noted smuggling station, where European goods are exchanged for the gold of Choco. A small fort which protects the gold mines of Cana is the principal station on the frontiers of Choco: its garrison is sent monthly from Panama.

Santa Cruz de Cana is the capital, and was formerly a considerable place. There were also at one time nine other towns or missions, and several hamlets; but most of them have been abandoned. In this province the Scotch attempted a settlement in 1699; and for this project a fund was subscribed, amounting to about £900,000 sterling. The plan, however, completely failed, partly, it is said, through the jealousy of the English, but chiefly from the unhealthiness of the climate. Of 1200 individuals who embarked for the colony, not above thirty survived.

Darien, a town of the United States, in Liberty county, Georgia, on the banks of the North Channel of the river Alatamaha, ten miles below Fort Barrington.

DARII, in logic, one of the modes of syllogism of the first figure, wherein the major proposition is an universal affirmative, and the minor and conclusion particular affirmatives: thus,

Da- Every thing that is moved is moved by another;
ri- Some body is moved;
i, Therefore, some body is moved by another.

DARIUS the Mede. See Cyaxares II.

DARK, *v. a., n. s.* & *adj.*, Dark'en, *v. a.* & *n. s.*, Dark'ener, *n. s.*, Dark'ish, *adj.*, Dark'ling, *part.*, Dark'ly, *adv.*, Dark'ness, *n. s.*, Dark'some, *adj.*, Dark'-working, *adj.* Saxon, deorck · Irish *dorch*. By antiphrasis, from δερκω, to see, says Minsheu. To deprive of light (one of our oldest verbs, as Mr. Todd remarks): the state

of being so deprived: not light; opaque; obscure; blind. Hence gloomy, not cheerful; not of a showy or vivid color. To darken is to make, as well as to grow, or gradually become, dark. Darkish is dusky; that which is approaching a black or dark color. Darkling is a poetical participle to express the state of being without light. The meaning of the other derivatives seems sufficiently obvious.

And the sunne was *derked* and the eir, of the smoke of the pitt. *Wiclif. Apoc.* 9.

Then the priest shall look: and, behold, if the bright spots in the skin of their flesh be *darkish* white. *Bible. Lev.* 14.

Who hath delivered us from the power of *darkness*, and translated us into the kingdom of his dear Son. *Colossians.*

Ther saw I first the *derke* imagining
Of felonie and alle the compassing;
The cruel ire, red as any glede,
The pikepurse, and eke the pale drede.
Chaucer. Cant. Tales.

Fair when that cloud of pride, which oft doth *dark*
Her goodly light, with smiles she drives away.
Spenser.

For light she hated as the deadly bale,
Ay wont in desert *darkness* to remaine,
Where plain none might her face see, nor she see any laine. *Spenser. Faerie Queene.*

What may seem *dark* at the first, will afterwards be found more plain. *Hooker.*

Such was his wisdom, that his confidence did seldom *darken* his foresight, especially in things near at hand. *Bacon.*

You must not look to have an image in any thing lightsome; for even a face in iron, red-hot, will not be seen, the light confounding the small differences of lightsome and *darksome*, which shew the figure. *Id.*

Come, thick night,
And pall thee in the dunnest smoke of hell,
That my keen knife see not the wound it makes;
Nor heaven peep through the blanket of the *dark*,
To cry, hold! hold! *Shakspeare. Macbeth.*

Fleance, his son, who keeps him company,
Must embrace the fate of that *dark* hour.
Shakspeare.

Meantime we shall express our *darker* purpose.
Id.

The instruments of *darkness* tell us truths;
Win us with honest trifles, to betray us
In deepest consequence. *Id.*

Darkling stands
The varying shore o' the world *Id.*

Cloud and ever-during *dark*
Surrounds me! from the cheerful ways of men
Cut off. *Milton.*

He, here with us to be,
Forsook the courts of everlasting day,
And chose with us a *darksome* house of mortal clay.
Id.

The wakeful bird
Sings *darkling*, and, in shadiest covert hid,
Tunes her nocturnal note. *Id.*

The age, wherein he lived, was *dark*; but he
Could not want sight, who taught the world to see.
Denham.

The lusts and passions of men do sully and *darken* their minds, even by a natural influence. *Tillotson.*

Thou wretched daughter of a *dark* old man,
Conduct my weary steps. *Dryden and Lee's Œdipus.*

For well you know, and can record alone,
What fame to future times conveys but *darkens* down.
Dryden.

Mistaken blessing, which old age they call,
'Tis a long, nasty, *darksome* hospital. *Id.*

All the light truth has, or can have, is from the clearness and validity of those proofs upon which it is received; to talk of any other light in the understanding, is to put ourselves in the *dark*; or in the power of the prince of *darkness*. *Locke.*

Whether the *darkened* room to muse invite,
Or whitened wall provoke the skewer to write. *Pope.*

All men of *dark* tempers, according to their degree of melancholy or enthusiasm, may find convents fitted to their humours. *Addison on Italy.*

Foul ministers, *dark-working* by the force
Of secret, sapping gold. *Thomson.*

Must helpless man, in ignorance sedate,
Roll *darkling* down the torrent of his fate?
Must no dislike alarm, no wishes rise,
No cries invoke the mercies of the skies?
Johnson. Vanity of Human Wishes.

Their quickness is owing to their presumption and rashness, and not to any hidden irradiation that in a moment dispels all *darkness* from their minds. *Burke.*

Dark will thy doom be, *darker* still
Thine immortality of ill. *Byron. Siege of Corinth.*

So do the *dark* in soul expire,
Or live like Scorpion girt by fire
So writhes the mind Remorse hath riven,
Unfit for earth, undoomed for heaven,
Darkness above, despair beneath
Around it flame, within it death! *Byron.*

DAR'LING, *adj.* & *n. s.* Sax. deorling, the diminutive of dear. Favorite; beloved. One much beloved.

Lo my child whom I have chosen; my *derlyng* in whom it hath wel plesid to my soul, I schal putte my Spirit on hym: and he schal telle doom to hethene men. *Wiclif. Matt.* 12.

Young Ferdinand they suppose is drowned,
And his and my loved *darling*. *Shakspeare.*

In Thames, the ocean's *darling*, England's pride,
The pleasing emblem of his reign does glide.
Halifax.

She became the *darling* of the princess.
Addison.

Have a care lest some beloved notion, or some *darling* science, too far prevail over your mind. *Watts.*

And to find out our most beloved sin, let us consider what are those worldly objects or amusements which give us the highest delight; this, it is probable, will lead us directly to some one of our *darling* iniquities. *Mason.*

The text, that sorts not with his *darling* whim,
Though plain to others, is obscure to him.
Cowper. Progress of Error.

Save me, oh! save me, from the sword dividing;
Give me my *darling* from the jaws of death;
Thee will I praise, and, in thy name confiding,
Proclaim thy mercies with my latest breath.
K. White.

DARLINGTON, a county of the United States, in Cheraws district, South Carolina, bounded on the south and south-west by Lynch's

Creek. It is thirty five miles long, and twenty-four broad.

DARLINGTON, a town of Durham, situated on a flat on the river Skerne. It stands on the great road from London to Edinburgh. It has a weekly market, and, excepting January and February, a fair once a fortnight through the year. This town carries on linen and woollen manufactures. A curious water machine for grinding optical glasses, and spinning linen yarn, has been erected here; the invention of a native of the town. It is nineteen miles south of Durham, and 247 north by west of London.

DARMSTADT, a neat town of Germany, the capital of the grand duchy of Hesse. It was fortified by a wall in 1330. The town contains a regency, a court of appeals, a consistory, and criminal court. The prince of Hesse Darmstadt entered into the late confederation of the states of the Rhine, and, by the treaty of alliance, received the title of grand duke, and royal highness. The palace of the landgrave Louis VII., and the modern residence of the grand duke, with its beautiful gardens, are principal objects: to which may be added, the town church with the tombs of the landgraves; the state house; the pædagogium, or academy; the public library; the library of the grand duke; the cabinet of natural history (containing a number of curious fossils); the military school; and the building appropriated to military exercises, an edifice 300 feet by 150, and capable of containing 3000 men. It is situated on a river of the same name, thirty miles north-west of Heidelberg, and contains 13,000 inhabitants.

DARN, or DEARNE, *v. a.* & *adj.* Ang.-Sax. deorn, secret, or concealed; Arm. and Wel. *darne*, a patch. To sew up, or conceal holes or rents by imitating the original texture: solitary; secret.

By many a *dearne* and painful perch,
Of Pericles the careful search
Is made. *Shakspeare. Pericles.*

He spent every day ten hours in his closet, in *darning* his stockings, which he performed to admiration. *Swift.*

Will she thy linen wash, thy hosen *darn*? *Gay.*

DAR'NEL, Sax. derren, hurtful. A grass of the temulentum species, hurtful to corn.

But while people were asleep, his enemy came, and sowed *darnel* among the wheat.
Matt. xiii. 25. *Campbell's Translation.*

He was met even now
Crowned with rank fumiter and furrow-weeds,
Darnel, and all the idle weeds that grow
In our sustaining corn. *Shakspeare.*

No fruitful crop the sickly fields return;
But oats and *darnel* choak the rising corn.
Dryden.

DARNLEY'S ISLAND, a beautiful island in the Eastern seas, in Torres Strait, between New Holland and New Guinea. It is about fifteen miles in circumference, and varied with hills and plains covered with vegetation. The inhabitants are stout, and exceed the ordinary size. The men go perfectly naked, and the women nearly so. They dwell in conical huts, disposed in villages, and adorned with two or three human skulls, and several strings of hands, five or six on a string. Their arms are bows and arrows, lances, and long clubs; and they have handsome canoes from fifty to seventy feet in length. They are apparently a treacherous race. Long. 142° 59′ 15″ E., lat. 9° 39′ 30″ S.

DARRAIN', *v. a* Old Fr. *desrener*. By Junius referred to dare. 'It seems to me,' says Dr. Johnson, 'more probably deducible from *arranger la battaille*.' To prepare, or range troops for battle; to commence single combat.

And on the morwe, or it were day light,
Ful prively two harneis hath he dight,
Both suffisant and mete to *darreine*
The bataille in the field betwix him tweine.
Chaucer. Cant. Tales.

Therewith they 'gan to hurlen greedily,
Redoubted battle ready to *darraine*. *Spenser*

Comes Warwick, backing of the duke of York;
Darrain your battle; for they are at hand.
Shakspeare.

The town-boys parted in twain, the one side calling themselves Pompeians, the other Cæsarians; and then *darraining* a kind of battle, but without arms, the Cæsarians got the over hand.
Carew's Survey of Cornwall.

DART, *v. a.*, *v. n.* & *n. s.* Fr., Teut. and Arm. *dard*; Swed. *dart*; Ital. *dardo*; from Gr. δορυ. To throw a missile, or short lance; to project any thing offensive; to emit; to fly as a dart; to let fly. As a substantive, it is the weapon thrown or darted.

In alle thingis take ghe scheeled of feith in which ghe moun quenche all the fyry *dartis* of the worste.
Wiclif. Effesies vi.

Now, *darting* Parthia, art thou struck.
Shakspeare.

He wets his tusks, and turns, and dares the war;
The invaders *dart* their javelins from afar. *Dryden.*

O'erwhelmed with *darts*, which from afar they fling,
The weapons round his hollow temples ring. *Id.*

Pan came, and asked what magick caused my smart;
Or what ill eyes malignant glances *dart*. *Pope.*

See, prompt to ill, the insiduous foe
Now couched in secret bend the bow,
Now to the string adjust the *dart*
That thirsts to wound the guiltless heart.
Merrick's Psalms.

Glad zephyr leads the van, and waves above
The barbed *darts*, and blazing torch of love;
Reverts his smiling face, and pausing flings
Soft showers of roses from aurelian wings.
Darwin

And that sarcastic levity of tongue,
The stinging of a heart the world hath stung,
That *darts* in seeming playfulness around,
And makes those feel that will not own the wound;
All these seemed his. *Byron.*

DARTFORD, a market town of Kent, in the road from London to Canterbury. Here was a celebrated nunnery, which Henry VIII. converted into a royal palace, and which is now a gentleman's seat. The river Darent will admit boats to bring up goods to the town. The first paper-mill in England was erected on this river by Sir John Spilman, to whom king Charles I. granted a patent with £200 a-year to encourage the manufactory. On this river also was the first

mill for slitting iron bars to make wire. The town was the first that engaged in the rebellion of Wat Tyler and Jack Straw: the market on Saturday is well supplied with provisions. It is seven miles west of Gravesend, fifteen east by south of London.

DARTMOOR, an extensive moor and forest in Devonshire, reaching from Brent to Oakhampton, twenty miles from south to north, and between five and fifteen miles broad from east to west. It contains about 80,000 acres, and is watered by the river Dart. Many sheep are bred here, but of a small kind, and subject to the rot. The chief riches of the inhabitants of the villages are their black cattle, which thrive well on the coarse herbage. Some thousands of acres of land have lately been cleared, and plantations formed; much barren ground has also been converted into tillage, under the direction of colonel Tyrwhit, by order of his present majesty, when prince of Wales. The French prison, formerly on this moor, is converted into an agricultural settlement for the poor.

DARTMOUTH, a sea-port town in Devonshire, seated on the river Dart, near its fall into the sea: said to have been formerly called Clifton. It is an ancient corporation, and a borough town, sending two members to parliament. The town is large, well built, and populous; but the streets are narrow, though well paved. The harbour is large and safe, capable of containing 500 ships; and the inhabitants have a considerable trade to the south of Europe, and to Newfoundland. Dartmouth is esteemed a great nursery for seamen, the fishery employing nearly 3000, a certain number of which the owners are obliged by act of parliament to select from land men. It has a weekly market on Friday for corn and provisions, and one almost every day for fish. It was burnt in the reign of Richard I. by the French, and again in the reign of Henry VI. They attempted it afterwards, but were repulsed, chiefly by the bravery of the women. Beside a great slaughter which was made, they took M. Castel the French general, three lords, and thirty-two knights, prisoners. It lies thirty miles S.S.W. of Exeter, and 204 west by south of London.

DARTMOUTH, a thriving sea-port town of the United States, in Bristol county, Massachusetts, situated on the west side of the Accushnet, seventy miles south of Boston. It was incorporated in 1664.

DARTMOUTH, a town of the United States, in Elbert county, Georgia, situated on the peninsula formed by the confluence of Broad and Savannah rivers, two miles from Fort James Dartmouth.—Also a town of the United States, in Grafton county, New Hampshire, north-west of the foot of the White Mountains: thirty-three miles north-east of Haverhill, and eighty-seven north-west of Portsmouth.

DARWAR, also called Nasserabad, a town and fortress of the province of Bejapore, Hindostan. Although not regularly fortified, it is by nature very strong, and the ditches are good. The town is situated to the south of the fort, and is surrounded by a wall and ditch. In the year 1685 it was taken from the king of Bejapore by Aurungzebe, and, soon after the decease of that monarch, fell into the hands of the Mahrattas, from whom it was taken by Tippoo in 1784, and retained by him till the year 1791, when it was retaken by the Mahrattas, assisted by the British, after a tedious siege of twenty-nine weeks. It has been lately ceded to the British.

DARWIN (Erasmus), an English physician and poet, was born in December, 1731, at Elston, near Newark. After receiving the early part of his education at Chesterfield, he was sent to St. John's College, Cambridge, where he studied medicine, and took his bachelor's degree in 1755. He was elected to one of Lord Chesterfield's scholarships, worth about £16 per annum. On leaving Cambridge, he attended the lectures of Dr. Hunter in London, and afterwards completed his medical studies at Edinburgh, where he took the degree of M. D. He first settled at Nottingham, as a physician; but, not meeting with the practice he hoped for, he went to Litchfield, where his knowledge and acquirements were justly appreciated. In 1757 he married the daughter of Charles Howard Esq., who died in 1770, leaving him three sons. Not long after the death of his wife, Dr. Darwin commenced his laborious work, the Zoonomia, but which he declined publishing for above twenty-five years. He next wrote his Botanic Garden, and The Loves of the Plants. About 1780 Dr. Darwin married the widow of colonel Pole, of Radbourne-hall, near Derby, who brought him a large fortune; and he removed, in consequence of this connexion, to Radbourne, with a view of settling in Derby. He continued in this neighbourhood till February 1802, when he removed to Breadwall Priory, about three miles distant, a commodious retirement for his age and infirmities, and at this place he died in his seventy-first year. The literary fame of Dr. Darwin rests on the Botanic Garden, with philosophical notes, in two parts; 1. The Economy of Vegetation; 2. The Loves of the Plants, 2 vols. 8vo.: Zoonomia, or the Laws of Organic Life, 4 vols. 8vo.: Phytologia, or the Philosophy of Agriculture and Gardening, 1 vol. 4to.: works which display not only the poet, but the botanist and the philosopher; though there is frequently too much sacrificed to imagination; and the author evinces a contempt for all religion. Dr. Darwin was also the author of several medical and philosophical papers in the Philosophical Transactions, a Treatise on Female Education, and a poem published since his death, entitled The Temple of Fame. He had likewise a principal share in the translation of Linnæus's Systema Vegetabulum, published in the name of the Botanical Society of Litchfield.

DASH, *v. a. v. n., n. s.* & *adv.* Goth. and Swed. *daska*; Scot. *dusch*. Serenius refers to the first as the etymology of our word, which Dr. Johnson considers in all its senses 'very doubtful.' Minsheu derives it from the Gr. δεισα, δεισω, and defines it 'to bedash, dabble, bemire with dust.' This is at any rate not improbable. It is a word variously applied. It signifies to throw; to strike; to break to pieces by collision; to besprinkle; to agitate; to mingle fluids; to strike off in haste; to blot; to confound; to strike down. As a neuter verb, to fly

off; to rush through, so as to scatter; to strike, as a ship upon a rock. As a noun, it expresses collision; infusion; a stroke made with the pen; a sudden blow, or striking appearance. Dryden uses it adverbially to express the sound of falling water.

Happy shall he be, that taketh and *dasheth* thy little ones against the stones. *Ps.* cxxxvii. 9.

If you *dash* a stone against a stone in the bottom of the water, it maketh a sound. *Bacon.*

They that stand high have many blasts to shake them;
And, if they fall, they *dash* themselves to pieces.
Shakspeare.

This tempest,
Dashing the garment of this peace, aboded
The sudden breach on't. *Id. Henry VIII.*

David's throne shall then be like a tree,
Spreading and overshadowing all the earth;
Or as a stone, that shall to pieces *dash*
All monarchies besides throughout the world.
Milton.

His tongue
Dropped manna, and could make the worse appear
The better reason, to perplex and *dash*
Maturest councils. *Id.*

If a woman once *dash* upon the rock of reproach, she hardly ever recruits her credit. *Bp. Taylor.*

Whacum, bred to *dash* and draw,
Not wine, but more unwholesome law.
Hudibras.

Nothing *dashed* the confidence of the mule like the braying of the ass, while he was dilating upon his genealogy. *L'Estrange.*

A man that cuts himself, and tears his own flesh, and *dashes* his head against the stones, does not act so unreasonably as the wicked man. *Tillotson.*

At once the blushing oars and brazen prow
Dash up the sandy waves, and ope the depths below.
Dryden.

Doeg, though without knowing how or why,
Spurred boldly on, and *dashed* thro' thick and thin;
Thro' sense and nonsense, never out or in. *Id.*

To *dash* this cavil, read but the practice of Christian emperors. *South.*

Some stronger power eludes our sickly will;
Dashes our rising hope with certain ill. *Prior.*

Never was *dashed* out, at one lucky hit,
A fool so just a copy of a wit. *Pope.*

To *dash* over this with a line, will deface the whole copy extremely, and to a degree that, I fear, may displease you. *Id.*

There is nothing which one regards so much with an eye of mirth and pity, as innocence, when it has in it a *dash* of folly. *Addison.*

Middling his head, and prone to earth his view,
With ears and chest that *dash* the morning dew.
Tickel.

Torrents that from yon promontory's head
Dashed furious down in desperate cascade
Heard from afar amid the lonely night,
That oft have led the wanderer right,
Are silent at the noise. *Beattie.*

— Here Time's huge fingers grasp his giant mace,
And *dash* proud Superstition from her base.
Darwin.

I should be so,
Had I a knife even; but it matters not—
Death hath a thousand gates; and on the marble,
Even at the altar foot, whence I look down
Upon destruction, shall my head be *dashed*,
Ere thou ascend it. *Byron.*

DAS'TARD, *v. a.*, *n. s.* & *adj.* } From Sax.
DAS'TARDISE, *v. a.* } ᵹᵹᵃᵣᵗᵣᵢᵹᵃⲛ, to
DAS'TARDLY, *adj.* & *adv.* } terrify. To affright; make faint-hearted; a coward; poltron.

The cruelty and envy of the people,
Permitted by our *dastard* nobles,
Have suffered me by the voice of slaves to be
Whooped out of Rome. *Shakspeare.*

Dastard and drunkard, mean and insolent·
Tongue-valiant hero, vaunter of thy might,
In threats the foremost, but the last in fight.
Dryden.

He had such things to urge against our marriage,
As, now declared, would blunt my sword in battle,
And *dastardise* my courage. *Id.*

Brawl and clamour is so arrant a mark of a *dastardly* wretch, that he does as good as call himself so that uses it. *L'Estrange.*

Bug-bear thoughts, in the minds of children, make them *dastards*, and afraid of the shadow of darkness ever after. *Locke.*

Curse on their *dastard* souls, they stand astonished!
Addison.

DASYPUS, the armadillo, or tatou, in zoology; a genus of quadrupeds, belonging to the order of bruta. The dasypus has neither fore-teeth nor dog-teeth; it is covered with a hard bony shell, intersected with distinct moveable zones or belts: this shell covers the head, the neck, the back, the flanks, and extends even to the extremity of the tail; the only parts to which it does not extend, are the throat, the breast, and the belly, which are covered with a whitish skin of a coarse grain, resembling that of a hen after the feathers are pulled off. The shell does not consist of one entire piece, like that of the tortoise; but is divided into separate belts, connected with each other by membranes, which enable the animal to move it, and even to roll itself up like a hedgehog. All the species of this animal are originally natives of the western continent, and are endowed with the faculty of extending and contracting their bodies, and of rolling themselves up like a ball, like the hedgehog, though not into so complete a sphere. They are very inoffensive, excepting when they get into gardens, where they devour the melons, potatoes, and other roots. They walk quickly; but can hardly be said to run or leap, so that they seldom escape the pursuit either of men or dogs. But they dig deep holes in the earth, and seldom go very far from their subterraneous habitations; or, when at a great distance, require but a few moments to make one. When taken, they roll themselves up, and will not extend their bodies unless they are held near a fire. There is no other method of making them come out from deep holes, but by forcing in smoke or water. The female generally brings forth four young ones every month; which is the reason why the species are so numerous, notwithstanding they are much sought after

on account of the sweetness of their flesh. The Indians likewise make baskets, boxes, &c., of the shells which cover their heads. Linnæus enumerates six species of dasypus, principally distinguished by the number of their moveable belts. Mr. Kerr, who prefers the arrangement of Buffon to that of Linnæus, enumerates ten species of this genus.

DATA, among mathematicians, a term for such things or quantities, as are given, or known, in order to find other things thereby that are unknown. Euclid uses the word data (on which he has a particular tract) for such spaces, lines, and angles as are given in magnitude, or to which we can assign others equal. From the use of this word in mathematics, it has been transplanted into other arts, as philosophy, medicine, &c.; where it expresses any quantity which, for the sake of a present calculation, is taken for granted to be such, without requiring an immediate proof for its certainty; called also the given quantity, number, or power.

DATCHET, a town in Buckinghamshire, near Windsor, with a bridge over the Thames, built in the reign of queen Anne, and noted for its frequent horse-races. It is situated in a valley surrounded on every side with steep hills.

DATE, *v. a.* & *n. s.* } Fr. *date*, from Ital.
DATE'LESS, *adj.* } *dato*; Lat. *datum*. To note a particular time; a time noted or appointed; the time and place at which a letter is written.

Of later *date* of wives hath he redde,
That som han slain hir husbondes in his bedde.
Chaucer. Cant. Tales.

His days and times are past,
And my reliance on his fracted *dates*
Has smit my credit. *Shakspeare. Timon.*

Then raise,
From the conflagrant mass, purged and refined,
New heavens, new earth, ages of endless *date*,
Founded in righteousness. *Milton.*

Could the declining of this fate, O friend,
Our *date* to immortality extend? *Denham.*

My father's promise ties me not to time;
And bonds without a *date*, they say, are void.
Dryden.

What time would spare, from steel receives its *date*;
And monuments, like men, submit to fate. *Pope.*

The accession of Elizabeth, from which we *date* the golden age of our language.
Johnson. Plan of Dictionary.

DATE, is derived from the Latin datum, given, and implies the place from whence, as well as the time when. Our ancient deeds had no dates, but only the month and year, to signify that they were not made in haste, or in the space of a day, but upon longer and more mature deliberation. The king's grants began with these words, præsentibus et futuris, &c.; but the grants of private persons, with omnibus præsentes literas inspecturis, &c.

DATE, *n. s.* } Lat. *dactylus*. A species
DATE-TREE, *n. s.* } of palm.

Hold, take these keys, and fetch more spices, nurse,
—They call for *dates* and quinces in the pastry.
Shakspeare.

DATE, in botany. See PHŒNIX

DATE, in law. A deed is good, though it mentions no date or has a false, or even an impossible date, as the 30th of February; provided the real day of its being dated or given, that is, delivered, can be proved. *Blackstone's Commentary*, vol. ii. p. 304.

DATI (Carlo), professor of polite learning at Florence, his native country, and the private friend of the poet Milton. The chief work to which Dati applied himself, was Della Pittura Antica, of which he published an essay in 1667. He died in 1675.

DATISCA, in botany, a genus of the dodecandria order, and diœcia class of plants; natural order thirty-fourth, miscellaneæ. Male, CAL. pentaphyllous: COR. none: the antheræ are sessile, long, and fifteen in number. Female, CAL. bidented: the STYLES three: CAP. triangular, three-horned, unilocular, pervious, polyspermous, inferior. Species two: 1. D. Cannabina, a native of Canada with a smooth stem; 2. D. hirta, a native of Pennsylvania with a rough hairy stem.

DATISI, in logic, a mode of syllogisms in the third figure, wherein the major is a universal affirmative, and the minor and conclusion particular affirmative propositions. Thus,

DA- All who serve God are kings;
TI- Some who serve God are poor;
SI. Therefore, some who are poor are kings.

The DATIVE, in Latin and Greek grammar, is the third case, and is used to express the state or relation of a person or thing to whose advantage or disadvantage some other thing is referred. In the English language, which has no dative, this relation is expressed by the prepositions *to* or *for*. In the Greek language, which has no ablative, the dative is used instead of it. See ABLATIVE.

DATUM, or DATUS, in ancient geography, a town of Thrace, situated between Neapolis and the river Nessus, built by a colony of Thracians, according to Eustathius; who places it on the sea-coast, near the Strymon, in a rich and fruitful soil, famous for ship-building and mines of gold; hence the proverb Δατος Αγαθων, denoting prosperity and plenty. It was taken by Philip of Macedon, who changed its name to Philippi. It was afterwards famous for the defeat of Brutus and Cassius by Augustus and Antony.

DATURA, the thorn apple, in botany, a genus of the monogynia order, and pentandria class of plants; natural order twenty-eighth, luridæ: COR. funnel-shaped, and plaited: CAL. tubular, angulated, and deciduous; CAPS. quadrivalved. There are seven species. D. stramonium, the common thorn-apple, rises about a yard high, with an erect, strong, round, hollow, green stalk, branching luxuriantly on every side; large, oval, irregularly angulated, dark green leaves; and from the divisions of the branches, large white flowers singly succeeded by oval, prickly capsules, growing erect, commonly called thorn apples. At night the upper leaves rise up and enclose the flowers. The blossoms have sometimes a tinge of purple or violet. The flowers consist of one large, funnel-shaped petal, having a long tube, and spreading pentagonal limb, succeeded by large roundish capsules of the size

of middling apples, closely beset with sharp spines. An ointment prepared from the leaves gives ease in external inflammations, and in the hæmorroids. Cows, horses, sheep, and goats, refuse this plant.

DAVAL (Peter Esq.) F.R.S., an eminent English mathematician. He was bred a barrister at law; was afterwards master in chancery; and at last accountant general of that court. He translated the Memoirs of the Cardinal de Retz, printed in 12mo. 1723. In the dispute concerning elliptical arches, when Blackfriars bridge was built, his opinion was applied for by the committee. His answer may be seen in the London Magazine for March 1760. He died January 8th, 1763.

DAVALLIA, in botany, a genus of the cryptogamia class, and order filices. Fructification in roundish distinct dots near the margin: INVOLUCRUM membranaceous, from the surface half-hooded, distinct, somewhat truncate, opening towards the margin. Species nineteen.

DAVANGIRI, a town of the south of India, province of Mysore, district of Chittledroog. It consists of 500 houses, with a small fort in the centre, and has an extensive manufacture of blankets. It carries on a good trade with the Carnatic and its vicinity.

DAUB, *v.a.v.n.&n.s.* DAUB'ER, *n.s.* DAUB'ERY, *n.s.* DAUB'ING, *n.s.* DAUB'Y, *adj.* } Fr. *dauber;* Belg. *dabben;* Irish *diob,* (mortar). To smear; cover with something adhesive, and gross, as mortar. Hence, to paint coarsely and vilely; to cover with gaudy or showy ornaments; to flatter. As a neuter verb, to play the hypocrite. Daubery and daubing are both used in the sense of the substantive daub; and dauby is an adjective, signifying viscous, adhesive.

She took for him an ark of bulrushes, and *daubed* it with slime and with pitch. *Exodus.*

When the wall is fallen, shall it not be said unto you, Where is the *daubing* wherewith ye have *daubed* it? *Ezekiel* xiii.

Since princes will have such things, it is better they should be graced with elegancy, than *daubed* with cost. *Bacon.*

So smooth he *daubed* his vice with shew of virtue,
He lived from all attainder of suspect. *Shakspeare.*

I cannot *daub* it further;
And yet I must. *Id.*

She works by charms, by spells; and such *daubry* as this is beyond our element. *Id.*

They snatched out of his hands a lame imperfect piece, rudely *daubed* over with too little reflection. *Dryden.*

Let him be *daubed* with lace, live high, and whore;
Sometimes be lousy, but be never poor. *Id.*

A sign-post *dauber* would disdain to paint
The one-eyed hero on his elephant. *Id.*

Not in vain the' industrious kind
With *dauby* wax and flowers the chinks have lined. *Id.*

Let every one, therefore, attend the sentence of his conscience; for, he may be sure, it will not *daub* nor flatter. *South.*

Hasty *daubing* will but spoil the picture, and make it so unnatural as must want false light to set it off. *Otway.*

The treacherous tapster, Thomas,
Hangs a new angel two doors from us,
As fine as *daubers* hands can make it. *Swift.*

And did you step in to look at the grand picture in your way back?—'Tis a melancholy *daub!* my lord; not one principle of the pyramid in any one group! *Sterne.*

If a picture is *daubed* with many bright and glaring colours, the vulgar admire it as an excellent piece. *Watts.*

DAUBENTON (Louis-Jean Marie), an eminent French anatomist and naturalist, born at Montbar in Burgundy, on the 29th of May, 1716. His father designed him for the church; but on his death, in 1736, Daubenton relinquished that pursuit for the study of physic and natural history; and in three years after took his degree at Rheims; after which he returned to his own country with the design of following the practice of medicine. But the celebrated Buffon, who was also a native of Montbar, having shortly before succeeded Dufay in the superintendance of the botanic garden, selected Daubenton to assist him in his improvements and arrangements. In 1742 Buffon procured for him the place of demonstrator of the cabinet of natural history, with a salary of only 500 francs, which was afterwards raised to 2000. The cabinet of natural history, which was of immense service, was arranged and in a great measure collected by his means. The appearance of the History of Quadrupeds, wherein he gave the dissection and description of 182 species, gained him a very high reputation, but raised the jealousy of Reaumur, who then considered himself at the head of natural history. About this time Buffon was persuaded to separate himself from Daubenton; but their intimacy afterwards revived, and continued till Buffon's death. Daubenton was admitted a member of the Academy of Sciences in 1744; and contributed many valuable dissertations on natural history to its memoirs. But his service to science was not confined to his pen and the press: from 1775 he gave lectures on natural history in the college of medicine; and in 1783 on rural economy. In 1784 he published his Instructions to Shepherds, a work of great excellence. In 1794, when France was ruled by a lawless rabble, it became a matter of necessity with Daubenton to make application to the section of Sans-culottes for a certificate of civism, to enable him to hold his place in the garden of plants. His request was made under the title of Shepherd Daubenton; and it was granted to him under that name with the greatest facility. At the garden of plants the Convention appointed him professor of mineralogy; and he gave lectures during the ephemeral existence of the Normal School. He was also the author of a Methodical View of Minerals, and a contributer to both the French encyclopædias. In 1799 he was elected a member of the conservative senate; but the first meeting he attended he fell from his seat in an apoplectic fit. Speedy assistance being procured, he was restored to his senses, and calmly pointed out, in different parts of his body, the progress of the paralysis, which terminated his life on the 1st of January 1800, in his eighty-third year.

DAUCUS, the carrot, in botany: a genus of the digynia order, and pentandria class of plants; natural order forty-fifth, umbellatæ: COR. a little radiated, hermaphrodite. The fruit bristly with short hairs. There are six species; but the one which chiefly merits attention is the D. carota, or common carrot. There are several varieties, as the white, the orange, and the purple carrot; but of these the orange is the most esteemed. Carrots are propagated by seeds, sown at different seasons of the year, to afford a supply for the table at all times. The season for sowing for the earliest crop is soon after Christmas. The situation should be open, and in a warm sandy light soil, well dug to a good depth, that the roots may meet with no obstruction in running down, so as to make them forked. The next crop should be sown in February, and the third in July for autumn; and lastly in the end of August, for those which are to stand the winter. These last will be fit for use in March, before any of the spring ones; but they are seldom so tender or well tasted. Carrots were first introduced into England by the Flemings, in the reign of queen Elizabeth.

DAVENANT (Charles), LL.D., an eminent author and civilian, eldest son of Sir William Davenant, was born in 1656, and educated in Cambridge. He wrote several political tracts, and some plays. He was in 1685 empowered, with the master of the revels, to inspect the plays designed for the stage, that no immoralities might be presented; and was also inspector general of exports and imports. His Essays on Trade were reprinted in 5 vols. 8vo in 1771. He died in 1714.

DAVENANT (John), bishop of Salisbury, the son of an eminent merchant in London, where he was born in 1570. He took his degree of A.M. in Queen's College, Cambridge, in 1587, and that of D.D. in 1609, when he was elected professor of divinity, and is chiefly known as having been sent by James I. to the synod of Dort, in 1618.

DAVENANT (Sir William), an eminent poet, born at Oxford in 1606. After some stay at the university, he entered into the service of Frances first duchess of Richmond, and afterwards of Fulke Greville, lord Brooke. Upon the death of Ben Jonson he was created poet laureat. He wrote his poem Gondibert at Paris, where he formed a design for carrying over a considerable number of artificers, especially weavers, to Virginia; but he and his company were seized by some parliament ships, and he was carried prisoner first to the Isle of Wight, and then to the Tower of London, where, by the mediation of Milton, he was allowed to be a prisoner at large. At this time tragedies and comedies being prohibited, he set up an opera, to be performed by declamation and music. This Italian opera began in Rutland-house in Charter-house yard, 1656; but was afterwards removed to the cockpit in Drury-Lane, and was much frequented for many years. His Madagascar, and other poems, were printed in 1648. He died in 1668.

DAVENTRY, an incorporate town of Northamptonshire, situated near the sources of the Avon and Nen, which flow into opposite seas. It is seventy-two miles N.N.W. from London, and ten from Northampton. The manor formerly belonged to John of Gaunt who had a castle here. The ancient priory is in ruins, but parts of it are inhabited by the poor. On a hill in the neighbourhood are some strong entrenchments occupied by Charles I. before the battle of Naseby. The ground formerly was used as a race course. The town is very narrow and badly paved, and the church but a poor piece of architecture. The affairs of the corporation are managed by thirteen burgesses, one of whom is annually chosen bailiff, a recorder, town clerk, two head wardens, and twenty common councilmen. The bailiff acts as justice of the peace and coroner of the inquest, and the bailiff and ex-bailiff, with the recorder, constitute a quorum of the corporation, and can attach for debts under £100, or, in criminal cases, commit the accused to the county-gaol. Daventry has a considerable manufacture of whips, and a good market for provisions on Wednesday.

DAUGHT'ER, *n. s.* } Sax. ᴅohτeꞃ; Goth.
DAUGHT'ERLY, *adj.* } *dauhtar;* Runick *dotter;* Germ. *dohter;* Dut. *dochter.* A female child; the wife of a son; in the plural, the females of a country. A female taken into the relation of a child, or addressed tenderly. Any female deity or imaginary personage. Daughterly is like, or behaving with the duty of, a daughter.

Jacob went out to see the *daughters* of the land.
Genesis.

Daughter, be of good comfort, thy faith hath made thee whole. *Matt.* ix. 22.

A *doughter* hadden they betwix hem two
Of twenty yere, withouten any mo,
Saving a child that was of half yere age
In cradle it lay and was a propre page.
Chaucer. Cant. Tales.

Your wives, your *daughters*,
Your matrons, and your maids, could not fill up
The cistern of my lust. *Shakspeare.*

Are you at leisure, holy father, now,
Or shall I come to you at evening mass?—
—My leisure serves me, pensive *daughter*, now *Id.*

Sir Thomas liked her natural and *daughterly* affection for him. *Cavendish's Life of More.*

Now Aurora, *daughter* of the dawn,
With rosy lustre purpled o'er the lawn. *Pope.*

Commerce, however we may please ourselves with the contrary opinion, is one of the *daughters* of fortune, inconstant and deceitful as her mother.
Johnson. Thoughts on Agriculture.

Is thy face like thy mother's, my fair child!
Ada! sole *daughter* of my house and heart?
When last I saw thy young blue eyes they smiled,
And then we parted,—not as now we part,
But with a hope. *Byron.*

DAVID, דוד, Heb. i.e. beloved, king of Israel, and Hebrew poet, was born at Bethlehem A.A.C. 1085, and died A.A.C. 1015, after having reigned seven years and a half in Hebron, and thirty-three in Jerusalem. We have a complete and faithful portrait of this great prince and poet of the Jews in Scripture; and while in this portrait no friend of revelation will pretend that we can exhibit a faultless character, the infidel Bayle allows him to have been a great and justly distin-

guished monarch and poet; and we may refer to his Historical and Critical Dictionary, for a full and tolerably impartial disquisition on the subject.

David (——), a celebrated modern French painter, was born about the middle of the last century, and became the pupil of Vien, an artist of considerable eminence. He was painter to the unfortunate Louis XVI. and in September, 1790, presented to the legislative body a picture, representing his entrance into the national assembly. He was afterwards a deputy from Paris to the national convention, where he voted for his royal master's death. With perfect consistency he became a member of the committee of Public Safety during the reign of terror, and closely connected himself with Robespierre. In January, 1794, he was president of the convention. On the fall of Robespierre, he contrived to elude the danger for some time; but at length, in May, 1795, he was committed to the Luxembourg. His professional friends, however, procured his liberation; but during the following winter he joined a new society of terrorists, assembled near the pantheon, and became their first president; and in 1799 attempted to re-establish the jacobin club. About this time he was made a member of the National Institute for the class of painting; and Buonaparte, in 1800, appointed him painter to the government. During the imperial domination, David enjoyed his highest reputation as a painter, and exercised considerable influence over the measures adopted by the government for the cultivation of the fine arts. On the restoration of the Bourbons he was exiled to Brussels, where he continued to employ his talents till the time of his death, which took place December the 29th, 1825. His best paintings are—The Rape of the Sabines; The Oath of the Horatii; The Death of Socrates; Napoleon presenting the Imperial Eagles to his Troops; Mars Disarmed by Venus and the Graces, a work executed at Brussels; and The Coronation of Napoleon, exhibited in London in 1822, and said to be the largest painting ever made on canvass. David was clearly of a most cruel and sanguinary disposition in the height of his political career, and it seems to have infected at one time the efforts of his genius. The deputy Reboul found him, in 1792, in the prison of La Force, calmly sketching the prisoners who were going to execution: 'What are you about,' said Reboul, 'I am catching the last impulses of nature in these rascals,' replied David. He will be thought by some of our readers a characteristic painter of Napoleon presenting the Imperial Eagles.

David I, king of Scots, succeeded his brother Alexander I., A. D. 1124, and died at Carlisle, A. D. 1153. See Scotland.

David II., king of Scots, succeeded his father Robert Bruce, A. D. 1320, when only seven years of age. His nonage proved disastrous to Scotland, and afforded Edward Baliol the opportunity of usurping the crown, by the aid of the English. See Scotland.

DAVID'S (St.), an episcopal town of South Wales, in Pembrokeshire, seated in a barren soil on the river Ilen, not a mile from the sea. It was once a considerable place, and had walls, which are now demolished. The cathedral is a fine structure. The see has a bishop, precentor, chancellor, treasurer, four arch-deacons, nineteen prebendaries, eight vicars choral, &c.: near the church formerly stood a college. St. Nun's Well, near this place, is occasionally resorted to on account of its medicinal virtues. From the cape, near it, there is a prospect into Ireland. It is twenty-four miles north-west of Pembroke, and 266 west by north of London.

DAVIDSON, a county of the United States, in Mero district, in Tennessee, bounded on the north by the state of Kentucky, on the east by Sumner, and on the south by the Indian territory. Its chief town, Nashville, lies on the great bend of Cumberland River.

DAVIES (Sir John), a distinguished statesman, and poet, born at Tisbury, in Wiltshire, in 1570, received his academical education at Queen's College, Oxford, and removed thence to the Middle Temple to study the law; but, after being called to the bar, was expelled from that society, for an insult which he publicly offered to the recorder of London. He now retired to Oxford, where he wrote his celebrated Nosce Teipsum, a poem, and courted the patronage of queen Elizabeth by writing, under the title of Hymns of Astrea, twenty-six acrostics in her praise. In 1601 he was restored to the Temple, and in the same year was chosen member of parliament for Corfe Castle, and took a distinguished part in the suppression of monopolies. He was sent to Ireland as solicitor-general, on the accession of James I., and became successively attorney-general, and justice of the assize; was made a sergeant of law, and knighted. In 1607 he accompanied the chief justice of Ireland on a progress through the counties of Monaghan, Fermanagh, and Cavan, and drew up an account of the circuit. He soon after visited England, to lay before the king an account of that country, in which he seems to have exercised his judicial function with great impartiality and public spirit; and on his return assiduously recommenced his labors. In 1612 he published A Discovery of the true Causes why Ireland has never been entirely subdued and brought under Obedience to the Crown of England, until the Beginning of His Majesty's happy Reign. During this year the first parliament was convoked for Ireland, formed by a general representation of Catholics and Protestants, and Sir John was chosen speaker of the house of commons. He published, in 1614, A Declaration concerning the title of Prince of Wales; and the year following his Reports of Cases adjudged in the King's Courts in Ireland. Soon after, returning to England, he went several circuits as a judge, and was elected member for Newcastle-under-Line. He was subsequently raised to the office of chief justice of England, but almost immediately cut off by a fit of apoplexy, in December, 1626. His poems were reprinted in 1773, 8vo., and form a part of various modern collections. His prose works were collected in one vol. 8vo. 1786, under the title of Historical Tracts, by Sir John Davies. This acute lawyer and politician married a daughter of lord Audley, but was most

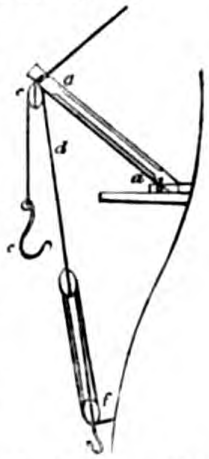
unhappy in his family, his son proving an ideot, and one of his daughters of a remarkably flighty disposition. His second daughter married lord Hastings.

DAVILA (Henry Catherine), a celebrated historian, the youngest son of Antonio Davila, grand constable of Cyprus. He was born in 1576, at an ancient castle in Padua, but was brought early into France. At the age of eighteen he signalized himself in the military scenes of that country; and at the siege of Amiens, where he fought under Henry IV., received a wound in the knee. After peace was established in France, he withdrew into Italy, and entered into the service of the Venetians. While at Venice, he wrote his admirable History of the Civil Wars of France, from the death of Henry II. in 1559, to the peace of Vervins in 1598. He continued to serve the republic of Venice with great reputation, till he was murdered, in 1631, by a brutal Veronese, called Il Turco, who entered the room of an hotel where he and his family were at supper, and, being reprimanded for his intrusion by Davila, discharged a pistol at the historian, and shot him dead in an instant. His eldest son Antonio, a youth of eighteen, revenged the death of his father by killing the murderer on the spot.

DAVIS (John), a famous navigator in the sixteenth century, was born at Sandridge, near Dartmouth in Devonshire; and distinguished himself by making three voyages to the northern parts of America, in order to find out a north-west passage to the East Indies; in which he discovered the Straits which bear his name. He afterwards performed five voyages to the East Indies; in the last of which he was slain in a desperate encounter with some Japanese, near the coast of Malacca, on the 27th of December, 1605. He wrote an account of a second voyage for the discovery of the north-west passage; a voyage to the East Indies; and other tracts.

Davis's Strait, a narrow sea, lying between the north main of America, and the western coast of Greenland; running north-west from Cape Farewell. Lat. 60° N. to Baffin's Bay in 80°. It extends to long. 75° W. communicating with Baffin's Bay, which lies to the north of this strait, and of the North Main, or James's Island

DAVISON (William), a statesman of Scottish origin, who became secretary of state to queen Elizabeth. His early life is little known, but in 1575 he was employed on a mission to Brabant and Flanders; and commissioned, in a similar way, in 1579, to the states of Holland. In 1583 he was employed confidentially in Scotland; and, acquiring considerable fame as a diplomatist, was made clerk of the council. On his return from a second embassy into the Low Countries, he was made secretary of state. Camden supposes that he was raised to this office in order to involve him in the mysterious transaction which now proved his ruin. When the commission was opened to bring Mary queen of Scots to trial, the name of secretary Davison was inserted in it, but it does not seem that he was present when it was opened, or ever assisted at Fotheringay Castle. The unhappy princess's death being resolved upon, it only remained to decide upon the manner of it, and here Davison differed with Walsingham, being of opinion that it should be open; upon which the latter pretended sickness, which threw the business of drawing up the warrant and bringing it to the queen for signature, on Davison. If Davison's apology, indeed, may be believed, he acted throughout under dictation; but he was tried in the Star Chamber for revealing the secrets of the queen's council, fined 10,000 marks, and sentenced to imprisonment during her majesty's pleasure; a copy of the proceedings being sent to king James to account for the death of his mother. The fine was rigorously levied; but he was assisted from time to time with small sums of money, and recommended to king James by the friendship of the earl of Essex. His final fortunes and time of death are not known.



DAVIT, in a ship, a long beam of timber, used as a crane whereby to hoist the flukes of the anchor to the top of the bow, without injuring the sides of the ship as it ascends; an operation which, by mariners, is called fishing the anchor. The anchors being situated on both the bows, the davit may be occasionally shifted, so as to project over either side of the ship, according to the position of that anchor on which it is employed. The inner end of the davit is secured by being fixed in the fore channels *b*, and upon the outer end is hung a large block *c*, through which a strong rope traverses, called the fish pendent *d*; to the foremost end of which is fitted a large iron hook *e*, and to the after end a tackle or complication of pullies *f*; the former of which is called the fish-hook, and the latter the fish tackle. The anchor being previously raised to the cat head. the fish-hook is fastened upon its flukes; and the effort of the tackle being transmitted to the hook, by means of the fish-pendent, draws up that part of the anchor sufficiently high upon the bow to fasten it. There is also a davit of a smaller kind occasionally fixed in the long-boat, and employed to weigh the anchor therein.

DAULE, a large navigable river of Quito, in the province of Guayaquil, which, after a course of sixty miles, falls into the Guayaquil, in lat. 2° 8′ S., on the west side. Its shores are covered with estates and gardens belonging to the inhabitants of Guayaquil, and abound in delicious fruits. It gives name to a small district.

DAUNT, *v. a.* } Fr. *domter*; Lat. *domiter*;
Daunt'less, *adj.* } but perhaps more imme-
Daunt'lessness. } diately derived to our language from Goth. and Swed. *dana*, signifying to make faint, amazed. To affright, discourage, intimidate. A dauntless man is he who cannot readily be intimidated.

Metellius, the foule cherle, the swine
That with a staf beraft his wif hire lif,
For she drank wine, though I had ben his wif,
Ne shuld he nat have *daunted* me fra drink.
Chaucer. Cant. Tales.

The Sarazin sore *daunted* with the buff,
Snatcheth his sword, and fiercely to him flies,
Who well it wards, and quyteth cuff with cuff.
Spenser. Faerie Queene.

Grow great by your example, and put on
The *dauntless* spirit of resolution. *Shakspeare.*

Fairfax, whose name in arms thro' Europe rings,
And fills all mouths with envy or with praise,
And all her jealous monarchs with amaze,
And rumours loud, which *daunt* remotest kings.
Milton.

Dauntless he rose, and to the fight returned:
With shame his glowing cheeks, his eyes with fury burned. *Dryden's Virgil.*

He not by wants or woes oppressed,
Stems the bold torrent with a *dauntless* breast.
Dryden.

Some presences *daunt* and discourage us, when others raise us to a brisk assurance. *Glanville.*

— With *dauntless* step she seeks the winding shore,
Hears unappalled the glimmering torrents roar;
With paper-flags a floating cradle weaves,
And hides the smiling boy in Lotus-leaves. *Darwin.*

DAUPHIN, a title given by the court of France to the presumptive heir of the crown, on account of the province of Dauphiné, which in 1349 was given to Philip VI. on this condition, by Hubert II. dauphin of Viennois. He is styled the eldest son of France. His crown is a circle of gold set round with eight fleur-de-lis, closed at the top with four dolphins whose tails conjoin under a fleur-de-lis.

DAUPHIN, in geography, a county of Pennsylvania, formerly contained in that of Lancaster. Its form is triangular; and it is surrounded by the counties of Mifflin, Cumberland, York, Berks, and Northumberland.

DAUPHINE', an extensive south-east province of France, containing the three departments of

	Population.	*Chief Towns.*
Isere,	471,660,	Grenoble.
Drôme,	253,372,	Valence.
Upper Alps,	124,763,	Gap.
	849,795.	

Its entire area is about 6700 square miles, the surface being very mountainous, and the lower division intersected by a ridge of the Alps. The pasture is universally good, except where the hills are covered with forests. They contain mines of copper, iron, and lead. The principal rivers are the Isere, the Durance, and the Drome, which rise in the Alps, and terminate in the Rhone. In the higher mountains it is cold and sharp, but on the banks of the Rhone the climate is warm. The valleys produce corn, flax, and olives; and the sides of the hills are covered with vines. The culture of silk is also prosecuted with success, particularly in Valence, Romans, Pierrelatte, and Montelimart. Cheese is a principal article of export. The ecclesiastical dignitaries are one archbishop (of Vienne), and three bishops (Grenoble, Valence, and Gap).

DAVY (William), a clergyman, who was educated at Baliol College, Oxford, where he took the degree of B.D. was curate of Lustleigh, in Devonshire, and the editor, printer, and publisher of a work entitled, 'A System of Divinity, in a course of Sermons on the First Institutes of Religion; on some of the most important articles of the Christian Religion in connexion; and on the several Virtues and Vices of Mankind; with occasional Discourses: being a compilation from the best sentiments of the polite writers and eminent sound divines, both ancient and modern, on the same subjects, properly connected, with improvements; particularly adapted for the use of chiefs of families and students in divinity, for churches, and for the benefit of mankind in general,' 26 vols. 8vo, 1785-1807. The singular history of this production is said to be this:—'Mr. Davy, having completed his preliminary arrangements, issued proposals for publishing his work by subscription; but, being unpatronised and unknown, he had no success. Undaunted by his disappointment, he determined to become his own printer. With a press which he constructed himself, and as many worn and cast-off types (purchased from a country printing-office) as sufficed to set up two pages, he fell to work. Performing every operation with the assistance of his female domestic only, and working off a page at a time, he finished forty copies of the first 300 pages. Twenty-six copies he distributed among the universities, the bishops, the royal society, and the reviews, expecting to derive from some quarter or other that patronage and assistance to which he fancied himself entitled. A second time disappointed, he would not abandon his project, but contracted his views, resolving in future to spare his expenses in paper. He had reserved only fourteen copies, and to that number he limited the impression of his entire work. After years of unremitting toil, he saw it completed in 26 volumes. Disdaining to get assistance, for which he could ill afford to pay, he put the books in boards with his own hands, and then took a journey to London for the express purpose of depositing a copy in each of the principal public libraries of the metropolis.' *Quarterly Review*

DAW, *n. s.* Supposed by Skinner so named from its note; by Junius to be corrupted from *dawl*, the Germ. *tul*, and *dol* in the Bavarian dialect, having the same signification. The name of a bird.

I will wear my heart upon my sleeve,
For *daws* to peck at. *Shakspeare. Othello.*

If death do quench us quite, we have great wrong,
That *daws*, and trees, and rocks should last so long,
When we must in an instant pass to nought. *Davies.*

The loud *daw*, his throat displaying, draws
The whole assembly of his fellow *daws*. *Waller.*

DAWES (Richard), a learned critic of the last century, was born in 1708, in Leicestershire. He was educated at Market Bosworth, and admitted a sizer of Emanuel College, Cambridge, of which he became a fellow in 1731, and in 1733 took the degree of M.A. He distinguished himself by his violent asperity towards Bentley, and in 1736 published a proposal for printing by subscription a translation into Greek verse of Milton's Paradise Lost; but the plan did not

proceed. In 1738 he was appointed master of the free grammar-school at Newcastle-upon-Tyne. In 1745 he published his Miscellanea Critica, intended as a specimen of an intended emendatory edition of all the Attic poets. But neither was this design ever completed; the Miscellanea, however, gained the author great reputation, and a second edition of it, with additions, was published in 1781, by Dr. Burgess, bishop of Salisbury. He resigned his schools in 1749, and retired to Heworth, where he died in 1766.

DAWK, *v. a.* & *n. s.* Scot. *dalk*. To mark with an incision. A word among workmen for a hollow, rupture, or incision, in their stuff.

Should they apply that side of the tool the edge lies on, the swift coming about of the work would, where a small irregularity of stuff should happen, jobb the edge into the stuff, and so *dawk* it. *Moxon.*

Observe if any hollow or *dawks* be in the length. *Id.*

DAWN, *v. n.* & *n. s.* } The past particiDAWNING, *n. s.* } ple, according to Mr. Tooke (Diversions of Purley, v. ii.), of Anglo-Saxon, ᵹagian, to grow light. To become day; to grow luminous. Hence to glimmer; to appear obscurely; to commence. The dawn, or dawning is used for the time between the first appearance of the sun's light and sun-rise.

As it began to *dawn* towards the first day of the week, came Mary Magdalene to see the sepulchre. *Matthew.*

At last faire Hesperus in highest skie
Had spent his lampe, and brought forth *dawning* light;
Then up he rose, and clad him hastily;
The dwarfe him brought his steed; so both away do fly. *Spenser. Faerie Queene.*

I have been troubled in my sleep this night;
But *dawning* day new comfort hath inspired. *Shakspeare.*

Such their guiltless passion was,
As in the *dawn* of time informed the heart
Of innocence and undissembling truth. *Tillotson.*

Then on to-morrow's *dawn* your care employ
To search the land, but give this day to joy. *Dryden.*

While we behold such dauntless worth appear,
In *dawning* youth, and souls so void of fear. *Id.*

A Romanist, from the very first *dawning* of any notions in his understanding, hath this principle constantly inculcated, that he must believe as the church. *Locke.*

All night I slept, oblivious of my pain;
Aurora *dawned*, and Phœbus shined in vain. *Pope.*

These tender circumstances diffuse a *dawn* of serenity over the soul. *Id.*

Haply some hoary-headed swain may say,
Oft have I seen him at the peep of *dawn*,
Brushing with hasty steps, the dews away,
To meet the sun upon the upland lawn. *Gray's Elegy.*

From the earliest *dawnings* of policy to this day, the invention of men has been sharpening and improving the mystery of murder, from the first rude essay of clubs and stones, to the present perfection of gunnery, cannoneering, bombarding, mining. *Burke.*

Then, on her beryl throne by Tritons borne,
Bright rose the goddess like the star of morn;
When with soft fires the milky *dawn* he leads,
And wakes to life and love the laughing meads. *Darwin.*

In such an enterprise to die is rather
The *dawn* of an eternal day, than death. *Byron.*

DAX, an old town of France, in Gascony, situated on a plain on the left bank of the Adour, a bridge across which unites it to the suburb, Sablar. It has a wall flanked with towers, and a castle. The place has been long celebrated for its mineral waters. In the middle of the town is a large and deep spring which throws out warm water in large quantities. The surrounding country is flat and sandy, but productive. To the north-west is an immense forest. Population 4400. It is twenty-five miles north-east of Bayonne, and eighty-five south by west of Bourdeaux.

DAY, *n. s.*
TO-DAY, *adv.*
DAILY, *adj.* & *adv*
DAY-BED, *n. s.*
DAY-BOOK,
DAY-BREAK
DAY-DREAM,
DAY-LABOR,
DAY-LABORER,
DAY-LIGHT,
DAY-LILY,
DAYSMAN,
DAY-SPRING,
DAY-STAR,
DAY-TIME,
DAY-WOMAN
DAY-WORK.

} Ang.-Sax. ᵹæᵹ; Goth. Swed. and Belg. *dag*; Teut. *tag*; Icel. *dagur*; Lat. *dies*; all probably from Gr. δαη, light. Minsheu says from Heb. דאה, to fly; or from the Belg. *dacht*, i. e. *de acht* (of aught, or some value), as Belg. *nacht*, night, is from *nie acht*, no value. The last conjecture is curious, and the coincidence remarkable. We leave the decision of these conflicting etymologies with the learned reader. The time between sun-rise and sun-set; from noon to noon; from one evening to another; or from midnight to midnight; or between any two points marking an artificial division of time of this kind; light, sunshine; any specified or appointed time; particularly a time appointed to give judgment, and therefore that judgment given; the period of human life; any remarkable period; time in general. To-day appears simply to signify on this day. The meaning o the compounds is obvious, except perhaps tha of daysman, which signifies an umpire or judge Dr. Johnson says, 'a surety.' But the instances from Job ix. and Spenser seem to confirm the former meaning, which is what Ainsworth gives. Wiclif clearly uses it for 'judgment,' in 1 Cor. iv.

And to me it is for the leeste thing that I be deemed of ghou or of mannys *dai*, but neither I deme mysilf. *Wiclif.* 1 *Cor.* iv.

I worche a werk in ghoure *daies*, a werk that ghe schulen not bileeue if ony man schal telle it ghou. *Id.*

And God called the light *day*, and the darkness he called night. And the evening and the morning were the first *day*. *Bible. Gen.* i. 5.

For he is not a man, as I am, that I should answer him, and we should come together in judgment. Neither is there any *daysman* betwixt us, that might lay his hand upon upon us both. *Id. Job.* ix. 32, 33.

To-day, if ye will hear his voice, harden not your hearts. *Psalm* xcv. 7.

Upon a *day* he got him more moneie
Than that the persone gat in monethes twice;
And thus with fained flattering and gapes,
He made the persone and the people his apes.
Chaucer. Prol. to Cant. Tales.

After him reigned Gutheline his heir,
The justest man and truest in his *days*.
Spenser. Faerie Queene.

By this the drooping *daylight* 'gan to fade,
And yield his room to sad succeeding night. *Id.*

For what art thou,
That makest thyself his *daysman*, to prolong
The vengeance prest? *Id.*

Bavaria hath been taught, that merit and service doth oblige the Spaniard but *from day to day*.
Bacon.

In the *daytime* Fame sittteth in a watch-tower, and flieth most by night; she mingleth things done with things not done, and is a terror to great cities. *Id.*

How many hours bring about the *day*,
How many *days* will finish up the year.
Shakspeare.

Much are we bound to heaven
In *daily* thanks, that gave us such a prince. *Id.*

The noble Thanes do bravely in the war;
The *day* almost itself professes yours,
And little is to do. *Id. Macbeth.*

Calling my officers about me, in my branched velvet gown; having come down from a *daybed*, where I have left Olivia sleeping.
Id. Twelfth Night.

Thou shalt buy this dear,
If ever I thy face by *daylight* see.
Now go thy way. *Id.*

I meant to make her fair, and free, and wise,
Of greatest blood, and yet more good than great:
I meant the *daystar* should not brighter rise,
Nor lend like influence from his lucent seat.
Ben Jonson.

True labour in the vineyard of thy lord,
Ere prime thou hast the' imposed *daywork* done.
Fairfax.

Or objects new
Casual discourse draws on, which intermits
Our *day's* work. *Milton.*

Doth God exact *daylabour*, light denied,
I fondly ask? *Id.*

In one night, ere glimpse of morn,
His shadowy flail hath threshed the corn
That ten *daylabourers* could not end. *Id.*

The breath of heaven, fresh-blowing, pure and sweet,
With *dayspring* born, here leave me to respire. *Id.*

Sunk though he be beneath the wat'ry floor;
So sinks the *day-star* in the ocean bed,
And yet anon repairs his drooping head. *Id.*

I saw you every *day*, and all the *day*;
And every *day* was still but as the first:
So eager was I still to see you more. *Dryden.*

Would you the' advantage of the fight delay,
If, striking first, you were to win the *day*? *Id.*

Or if my debtors do not keep their *day*,
Deny their hands, and then refuse to pay,
I must with patience all the terms attend. *Id.*

I watched the early glories of her eyes,
As men for *daybreak* watch the Eastern skies. *Id.*

Daylabour was but an hard and a dry kind of livelihood to a man that could get an estate with two or three strokes of his pen. *South.*

We have, at this time of *day*, better and more certain means of information than they had.
Woodward.

Yet are we able only to survey
Dawnings of beams, and promises of *day*.
Prior.

Cease, man of woman born! to hope relief
From *daily* trouble, and continued grief. *Id.*

I think, in these *days*, one honest man is obliged to acquaint another who are his friends. *Pope.*

If bodies be illuminated by the ordinary prismatick colours, they will appear neither of their own *daylight* colours, nor of the colour of the light cast on them, but of some middle colour between both.
Newton's Opticks.

Of night impatient, we demand the *day*;
The *day* arrives, then for the night we pray.
The night and *day* successive come and go,
Our lasting pains no interruption know.
Blackmore.

My ants never brought out their corn but in the night when the moon did shine, and kept it underground in the *daytime*. *Addison.*

The *daily* labours of the bee
Awake my soul to industry;
Who can observe the careful ant
And not provide for future want? *Gay.*

The past is all by death possest,
And frugal fate, that guards the rest,
By giving, bids us live *to-day*. *Fenton.*

Are these the questions that raise a flame in the minds of men at this *day*? If ever the church and the constitution of England should fall in these islands (and they will fall together), it is not presbyterian or popish hierarchy that will rise upon their ruins.
Burke.

Thus Genius rose and set at ordered times,
And shot a *day-spring* into distant climes,
Ennobling every region that he chose;
He sunk in Greece, in Italy he rose.
Cowper's Table Talk.

Parting *day*
Dies like the dolphin, whom each pang imbues
With a new colour as it gasps away,
The last still loveliest, till—'tis gone— and all is gray.
Byron.

DAY, CIVIL. See CHRONOLOGY.

DAY, NATURAL. See CHRONOLOGY.

DAY, SIDEREAL; DAY, SOLAR. See ASTRONOMY.

DAYS OF GRACE, in commerce, are a customary number of days allowed for the payment of a bill of exchange, &c., after the same becomes due. Three days of grace are allowed in Britain; ten in France and Dantzic; eight at Naples; six at Venice, Amsterdam, Rotterdam, and Antwerp; four at Francfort; five in Leipsic; twelve at Hamburg, &c. In Britain the days of grace are given and taken as a matter of course, the bill being only paid on the last day: but in other countries, where the time is much longer, it would be thought dishonorable for a merchant to take advantage of it; bills are therefore paid on the very day they fall due.

DAYS OF GRACE, in law, are those granted by the court at the prayer of the defendant or plaintiff.

DAY (Thomas), a benevolent English writer, born in the metropolis, in 1748. While an infant, he was left heir to a fortune of £1200 a year by the death of his father, who was a collector of the customs. He received the first part of his education at the Charter-house, and was afterwards sent to Corpus Christi College, Oxford. Leaving Oxford he entered of the Middle Temple, and, having been disappointed in an

early affection, took two foundling girls, with the intention of modelling their minds and manners. The former he placed with a milliner, but the latter he took under his own instruction, till, finding his scheme fruitless, he gave it up, and sent her to a school. He is principally known as the author of the History of Sandford and Merton, a tale for youth, bearing no small similarity to Rousseau's Emilius. Mr. Day's opinions were more theoretical and sentimental than adapted to the world as he found it: an instance of which occasioned his death. Having a foal which he wished to ride, he would not suffer it to be previously broke in, by those usually employed in the task, but, undertaking the management of it himself, was thrown from its back, and received a severe kick on the head, of which he died, September 8th, 1789.

DAY-COAL, in natural history, a name given by the miners of England, and the people who live in coal countries, to that seam or stratum of the coal which lies uppermost in the earth. See COAL.

DAZE, *v. a.* } Sax. dæzian, to shine.
DAZZLE, *v. a.* & *v. n.* } Mæs.-Goth. *dagsian;*
DAZZLEMENT, *n. s.* } Goth. and Swed. *dasa.*

To overpower with light, so as to confuse or stupify: for both daze and dazzle may be regarded as the same active verb. Hence to dazzle is also to strike with surprise; to astonish; and 'a dazed person,' in the North of England, is one of a vacant, staring countenance. As a neuter verb, to dazzle, is to be overpowered with light; to become blind.

Proud of such glory and advancement vayne,
While flashing beames do *daze* his feeble eyen,
He leaves the welkin way most beaten playne;
And, wrapt with whirling wheeles, inflames the skyers
With fire not made to burne, but fayrely for to shyne.
Spenser. Faerie Queene.

The crystall glass, which lent mine eyes their light,
Doth now waxe dym, and *dazeled* all with dread;
My senses all, wyll now forsake me quite,
And hope of health abandoneth my head.
Gascoigne.

Fears use to be represented in such an imaginary fashion, as they rather *dazzle* men's eyes than open them. *Bacon.*

An overlight maketh the eyes *dazzle*, insomuch as perpetual looking against the sun would cause blindness. *Id.*

Dazzle mine eyes? or do I see three suns?
Shakspeare.

Mysteries
Are like the sun, *dazzling*, yet plain to all eyes.
Donne. Satires.

They smote the glistering armies, as they stand,
With quivering beams, which *dazed* the wond'ring eye.
Fairfax.

Those heavenly shapes
Will *dazzle* now this earthly with their blaze
Insufferably bright. *Milton.*

Poor human kind, all *dazed* in open day,
Err after bliss, and blindly miss their way.
Dryden.

Ah, friend! to *dazzle* let the vain design;
To raise the thought, or touch the heart, be thine.
Pope.

It is with books as with women, where a certain plainness of manner and of dress, is more engaging than that glare of paint and airs and apparel, which may *dazzle* the eye, but reaches not the affections.
Hume

We gaze and turn away, and know not where,
Dazzled and drunk with beauty, till the heart
Reels with its fulness; there—for ever there—
Chained to the chariot of triumphal Art,
We stand as captives, and would not depart.
Byron.

DAZE, in natural history, a name given by our miners to a glittering sort of stone, which often occurs in their works; and, as it is an unprofitable substance, is one of those things they call weeds. The word is applied by them to every stone that is hard and glittering; and therefore comprehends the whole genus of the telangia, or stony nodules, which have the flakes of talc in their substance.

DEACON, *n. s.* } Gr. διακονος. A minister or official servant of the church, from δια, emphatic; and κονεω, to serve.
DEACONESS,
DEACONRY,
DEACONSHIP.

See the following article. Deaconry is both the office of a deacon, and a sort of hospital or religious house at Rome.

Also (it bihoueth) *dekenes* to be chaast, not double tunged. *Wiclif.* 1 *Tymo.* iii.

Likewise must the *deacons* be grave, &c.
Bible. 1 *Tim.* iii.

When a contemptuous bold *deacon* had abused his bishop, he complained to S. Cyprian, who was an arch-bishop, and indeed S. Cyprian tells him he did honour him in the business that he would complain to him. *Bp. Taylor.*

Timothy was to prefer those who formerly had been employed by the church as *deaconesses*, and had discharged that office with faithfulness and propriety.
Macknight on 1 *Tim.* v. 10.

There were fourteen of these *deaconries* or hospitals, at Rome, which wore reserved to the cardinals. Du Cange gives in their names. *Chambers.*

DEACON, in civil polity, the præses of a corporation, in the royal boroughs of Scotland.

DEACON, in ecclesiastical polity, διακονος, a servant, one whose business is to baptize, read in the church, and assist at the celebrations of the eucharist. Seven deacons were instituted by the apostles, Acts vi., which number was retained a long time in several churches. Their office was to serve in the Agapæ, and to distribute the bread and wine to the communicants. Another part of their office was to be a sort of directors to the people in the exercise of their public devotions in the church; for which purpose they used certain forms of words, to give notice when each part of the service began. Whence they are sometimes called eirokerukes, or holy criers of the church. Deacons had, by license from the bishop, a power to preach, to reconcile penitents, to grant absolution, and to represent their bishops in general councils. Their office out of the church was to take care of orphans, widows, prisoners, and all the poor and sick who had any title to be maintained out of the revenues of the church; to enquire into the morals of the people, and to make their report to the bishop. Whence, on account of the variety of business, it was usual to have several deacons in the same church. In the Romish church, it is the deacon's office to

incense the officiating priest or prelate; to lay the corporal on the altar; to receive the patera or cup from the subdeacon, and present it to the person officiating; to incense the choir; to receive the pax from the officiating prelate, and carry it to the subdeacon; and at the pontifical mass, when the bishop gives the blessing, to put the mitre on his head, and to take off the archbishop's pall and lay it on the altar. In England, the form of ordaining deacons, declares that it is their office to assist the priest in the distribution of the holy communion; in which, agreeably to the practice of the ancient church, they are confined to the administering wine to the communicants. A deacon in the Church of England is not capable of any ecclesiastical promotion; yet he may be a chaplain to a family, curate to a beneficed clergyman, or lecturer to a parish church. He may be ordained at twenty-three years of age, but it is expressly provided, that the bishop shall not ordain the same person a priest and deacon in the same day. The qualifications of a deacon in the primitive church are mentioned by the apostle Paul, 1 Tim. iii. 8—13.

Deaconess, an order of women who had their distinct offices and services in the primitive church. This office appears as ancient as the apostolical age; for St. Paul calls Phebe, διακονος, a servant of the church of Cenchrea. Tertullian calls them, viduæ, widows, because they were commonly chosen out of the widows of the church; and Epiphanius, and the council of Laodicea, call them πρεσβυτιδας, elderly women, because none but such were ordinarily taken into this office. For, by some ancient laws, these four qualifications were required in every one that was to be admitted into this order:—1. That she should be a widow. 2 That she should be a widow that had borne children. 3. A widow that has been but once married. 4. One of a considerable age, forty, fifty, or sixty years old: though all these rules admitted of exceptions. One part of their office was to assist the minister at the baptizing of women. Another part was to be private catechists to the female catechumens who were preparing for baptism. They were likewise to attend the women that were sick and in distress; to minister to martyrs and confessors in prison; to attend the women's gate in the church; and, lastly, to assign all women their places in the church, regulate their behaviour, and preside over the rest of the widows, whence in some canons they are styled προκαθεμεναι, governesses. This order, which since the tenth or twelfth century has been wholly laid aside, was not abolished at once, but continued in the Greek church longer than in the Latin, and in some of the Latin churches longer than in others.

Deaconry, diaconia, is a name given to the chapels and oratories in Rome, under the direction of the several deacons, in their respective regions or quarters. To the deaconries were annexed a sort of hospitals or boards for the distribution of alms governed by the regionary deacons, called cardinal deacons, of whom there were seven answering to the seven regions, their chief being called the archdeacon. The hospital adjoining to the church of the deaconry had an administrator for the temporal concerns, called the father of the deaconry, who was sometimes a priest and sometimes a layman.

DEAD, *v. a. v. n. n. s.* & *adj.*
DEADEN, *v. a.*
DEADLY, *adj.* & *adv.*
DEADLINESS, *n. s.*
DEADNESS, *n. s.*
DEAD-BORN, *adj.*
DEAD-DOING, *part. adj.*
DEAD-LIFT, *n. s.*
DEAD-RECKONING. *n. s.*

Sax. deaꝺ; Goth. and Icel. *daud*; Teut. *tod*. See Death. As active verbs, to dead and to deaden, both signify to cause death, as well as to deprive of power or force; to make vapid or spiritless; but are nearly obsolete. Lord Bacon uses dead as a neuter verb. Dead, the adjective, is, deprived of life; senseless; without motion; inactive; empty; void; dull; useless; unadorned; flat in taste; vapid. As a noun, it signifies those who have suffered death, and, figuratively, a still or quiet season. Deadly is, mortal, or like death. Dead-doing is, that which is destructive, having the power or design to kill. Deadliness is that state or condition which threatens death; a dead-lift is 'hopeless exigence,' says Dr. Johnson; that is, figuratively, for the original idea is the heavy mass or 'dead weight' which a lifeless body becomes. See the example from Locke. Dead-reckoning is a sea phrase, meaning the reckoning that is kept without observation of the heavenly bodies.

How seyn summen among ghou that the aghenrisynge of *deede* men is not? and if the aghenrisynge of *deede* men is not, neither crist roos aghen fro *deeth*. *Wiclif.* 1 *Cor.* 15.

There was not a house where there was not one *dead*. *Exod.* xii. 30.

At thy rebuke, O God of Jacob, both the chariot and horse are cast into a *dead* sleep. *Psalms.*

I will break Pharaoh's arms, and he shall groan before him with the groanings of a *deadly* wounded man. *Ez.* xxx. 24.

Therewith the fire of jalousie up sterte
Within his brest, and hent him by the herte
Soo woodly, that he like was to behold
The box-tree, or the ashen *ded* an cold.
Chaucer. Cant. Tales.

Hold, O dear lord, your *dead-doing* hand,
Then loud he cried, I am your humble thrall.
Spenser.

Loth was that other, and did faint though feare
To taste the' untried dint of *deadly* steele;
But yet his lady did so well him cheare,
That hope of new good hap he gan to feele.
Id. Faerie Queene.

That the sound may be extinguished or *deaded* by discharging the pent air, before it cometh to the mouth of the piece, and to the open air, is not probable. *Bacon.*

The beer and the wine, as well within water as above, have not been palled or *deaded* at all. *Id.*

Anointing of the forehead, neck, feet, and backbone, we know is used for procuring *deep* sleeps. *Id.*

Iron, as soon as it is out of the fire, *deadeth* straitways. *Id. Natural History.*

She then on Romeo calls—As if that name,
Shot from the *deadly* level of a gun,
Did murther her. *Shakspeare.*

Like dumb statues, or unbreathing stones,
Stared each on other, and looked *deadly* pale.
Shakspeare.

The queen, my lord, is *dead*:
——— She should have died hereafter.
Id. Macbeth.

The tin sold sometimes higher, and sometimes lower, according to the quick vent and abundance, or the *dead* sale and scarcity. *Carew.*

But why doth Balbus his *deade-doing* quill
Parch in his rusty scabbard?
Bishop Hall. Satires. vi. 1.

Their flight was only deferred until they might cover their disorders by the *dead* darkness of the night. *Hayward.*

Travelling over Amanus, then covered with deep snow, they came in the *dead* winter to Aleppo.
Knolles.

And have no power at all, nor shift
To help itself at a *dead-lift*. *Hudibras.*

They never care how many others
They kill, without regard of mothers,
Or wives, or children, so they can
Make up some fierce *dead-doing* man. *Id.*

In the *dead* of the night, when the men and their dogs were all fast asleep. *L'Estrange.*

When it (the cavity) was closed up, the bell seemed to sound more *dead* than it did when just before it sounded in the open air. *Boyle.*

She either from her hopeless lover fled
Or with disdainful glances shot him *dead*. *Dryden.*

Jove saw from high, with just disdain,
The *dead* inspired with vital life again. *Id.*

Nought but a blank remains, a *dead* void space,
A step of life, that promised such a race *Id.*

At a second sitting, though I alter not the draught, I must touch the same features over again, and change the *dead* colouring of the whole. *Id.*

Young Arcite heard, and up he ran with haste,
And asked him why he looked *deadly* wan? *Id.*

Your gloomy eyes betray a *deadness*,
And inward languishing. *Dryden and Lee's Œdipus.*

Mettled schoolboys, set to cuff,
Will not confess that they have done enough,
Though *deadly* weary. *Orrery.*

After this life, to hope for the favours of mercy then, is to expect an harvest in the *dead* of winter.
South.

They cannot bear the *dead* weight of unemployed time lying upon their hands, nor the uneasiness it is to do nothing at all. *Locke.*

That the *dead* shall rise and live again, is beyond the discovery of reason, and is purely a matter of faith. *Id.*

This motion would be quickly *deadened* by counter-motions. *Glanville's Scepsis Scientifica.*

All, all but truth, drops *dead*-born from the press,
Like the last gazette, or like the last address. *Pope.*

How cold and *dead* does a prayer appear, that is composed in the most elegant forms of speech, when it is not heightened by solemnity of phrase from the sacred writings. *Addison.*

Our dreams are great instances of that activity which is natural to the human soul, and which is not in the power of sleep to *deaden* or abate. *Spectator.*

Somewhat is left under *dead* walls and dry ditches.
Arbuthnot.

Anodynes are such things as relax the tension of the affected nervous fibres, or destroy the particular acrimony which occasions the pain; or what *deadens* the sensation of the brain, by procuring sleep.
Id. on Diet.

A little rill of scanty stream and bed—
A name of blood from that day's sanguine rain:
And Sanguinetto tells ye where the *dead*
Made the earth wet, and turned the unwilling waters red. *Byron.*

But, hark!—that heavy sound breaks in once more,
As if the clouds its echo would repeat,
And nearer, clearer, *deadlier* than before!
Arm! arm!—it is—it is—the cannon's opening roar!
Id.

Dead-eye, in maritime affairs, a sort of round flattish wooden block, usually encircled with a rope, or with an iron band, *g*, and pierced with three holes through the flat part, in order to receive a rope called the lanyard *h*, which, corresponding with three holes in another dead-eye *i*, creates a purchase employed for various uses, but chiefly to extend the standing rigging. In order to form this purchase, one of the dead-eyes is fastened in the upper link of each chain on the ship's side, which is made round to receive and encompass the hollowed outer edge of the dead-eye. After this the lanyard is passed alternately through the holes in the upper and lower dead-eyes, till it becomes six-fold; and is then drawn tight by the application of mechanical powers.

Dead-lights, certain wooden ports, which are made to fasten into the cabin windows, to prevent the waves from gushing into the ship in a high sea; and, as they are made exactly to fit windows, and are strong enough to resist the waves, they are always fixed in on the approach of a storm, and the glass lights taken out, which must otherwise be shattered to pieces by the surges, and suffer great quantities of water to enter the vessel.

Deadly Feud, in English law-books, a profession of irreconcilable enmity, till a person is revenged by the death of his enemy. See Feud. Such enmity and revenge were allowed by law in the time of the Saxons. If any man was killed, and a pecuniary satisfaction was not made to the kindred, it was lawful for them to take up arms and revenge themselves on the murderer: this was called deadly feud; and probably was the original of an appeal.

Dead Sea, in geography, a lake of Judea, into which the river Jordan discharges itself. See Asphaltites.

Dead Water, at sea, the eddy water just astern of a ship; so called because it does not pass away so swift as the water running by her sides does. They say that a ship makes much dead-water when she has a great eddy following her stern.

DEAF, *v. a.* & *adj.*
Deafen, *v. a.*
Deafly, *adv.*
Deafness, *n. s.*
} Sax. aðeaɾian, ðeaɾ; Goth. *deif*; Dan. *doev*. Minsheu says, Teut. *daub*, from Heb. דאב, weak: and this seems confirmed by an old

meaning of the word in our language, i.e. sterile, unprofitable. To deprive of hearing; to stun: wanting the sense of hearing, totally or partially; dull; determined against a request or solicitation: applied also to sounds heard imperfectly, i. e. weakly. It requires *to* before the thing or sound that ought to be heard.

And by so myche more thei wondriden and seiden, he dide wel alle thingis and he made *deefe* men to here and doumbe men to speke. *Wiclif. Mark* 7.

A good wif was ther of beside Bathe,
But she was some del *defe*, and that was scathe.
Chaucer. Prol. to Cant. Tales.

Come on my right hand, for this ear is *deaf*.
Shakspeare.

I will be *deaf to* pleading and excuses;
Nor tears nor prayers shall purchase out abuses. *Id.*

Hearing hath *deafed* our sailors; and if they
Know how to hear, there's none know what to say.
Donne.

I found such a *deafness* that no declaration from the bishops could take place. *King Charles.*

A swarm of their aerial shapes appears,
And fluttering round his temples, *deafs* his ears.
Dryden.

But Salius enters: and, exclaiming loud
For justice, *deafens* and disturbs the crowd. *Id.*

Nor silence is within, nor voice express,
But a *deaf* noise of sounds that never cease;
Confused and chiding like the hollow roar
Of tides receding from the insulted shore. *Id.*

Those who are deaf and dumb, are dumb by consequence from their *deafness*. *Holder.*

Whilst virtue courts them; but, alas, in vain!
Fly from her kind embracing arms,
Deaf to her fondest call, blind to her greatest charms.
Roscommon.

If any sins afflict our life
With that prime ill, a talking wife,
Till death shall bring the kind relief,
We must be patient, or be *deaf*. *Prior.*

Thus you may still be young to me,
While I can better hear than see:
Oh ne'er may fortune shew her spite,
To make me *deaf*, and mend my sight. *Swift.*

Hope, too long with vain delusion fed,
Deaf to the rumour of fallacious fame,
Gives to the roll of death his glorious name.
Pope.

The Dunciad had never been writ, but at his request, and for his *deafness*; for, had he been able to converse with me, do you think I had amused my time so ill? *Id.*

From shouting men, and horns, and dogs, he flies,
Deafened and stunned with their promiscuous cries.
Addison.

Wheel in wide circle, form in hollow square,
And now they front, and now they fly the war,
Pierce the *deaf* tempest with lamenting cries,
Press their parched lips, and close their blood-shot eyes. *Darwin.*

DEAFNESS arises commonly either from an obstruction or a compression of the auditory nerve; from some collection of matter in the cavities of the inner ear; from the auditory passage being stopped up by some hardened excrement; or lastly, from some excrescence, a swelling of the glands, or some foreign body introduced within it.

There are also diseases of the internal ear that admit of no distinct classification, and sometimes such defects of the auditory nerves, either as a whole or in part, as to occasion this unhappy peculiarity. The sensibility of these nerves, like that of the rest of the body, becomes also weakened by age and various diseases, so as to occasion what is properly called a loss of hearing.

Our object in this paper is to consider deafness distinctly, and as a disease. Its unhappy consequence, in those who are born deaf, DUMBNESS, is an entirely different topic: at least in a nosological point of view. We shall first treat of both distinctly, and then, in the latter article, give some account of the modern efforts to ameliorate the situation of those in whom these disorders are hopeless. And,

1. *Of deafness from deficiency in the auditory organs.*—We are said to possess more accurate and detailed descriptions of the anatomy of the ear than of any other part of the body: in our articles ANATOMY and PHYSIOLOGY we shall be seen to avail ourselves of them. But it is remarkable that the profession of an aurist is almost new to the medical world, and that many diseases and deficiencies of the organs of the ear are yet to be explained. We have perhaps, therefore, less of the just application of knowledge to its diseases than to those of any other part.

The office of individual portions of this complicated organ, for instance, has been but very imperfectly ascertained. Numerous observations seem to indicate that considerable injuries and deficiencies of the membrana tympani may take place without producing much effect upon the faculty of hearing. Persons who, by driving smoke taken in at the mouth, in large volumes through the ears, indicate a deficiency of this kind, are often found acute in the perception of sounds; and Sir Astley Cooper mentions an instance in which the membrana tympani of one ear being totally destroyed, and that of the other nearly so, by disease, it appeared that the deafness was inconsiderable, and that sound was most readily perceived by the ear in which no trace of the membrane could be discovered. In the same case, the ear was nicely susceptible of musical tones, the individual played well on the flute, and sang perfectly in tune. The power of accommodating the ear to differing intensity of sound was, indeed, lost for some time after the destruction of the membrane: it, however, gradually returned; and at the period of examination there was no distress arising from that deficiency.

Where deafness has followed the accidental destruction or continued disease of this membrane, it would appear to arise more directly, therefore, from its effect on neighbouring organs, as on the membranes of the fenestra, and the fluid of the labyrinth, which seem to be essential to the distinct conveyance of sound. The tympanum is, in fact, only one of the outward portals of this mysterious temple, though the last of them at which the sound arrives.

Its functions seem to be analogous with those of the pinna, or outward ear, i.e. to regulate

and direct, only in a more perfect degree, the waves and impressions of sound. In the case above quoted, after this membrane had been so materially injured, the muscles of the external ear seemed to acquire a new power of moving upward, and backwards, which was regularly exerted in the effort to catch an indistinct sound. The whole of the pinna, we need hardly observe, has been frequently removed without any abiding injury to the hearing. And in cases where the auricle has never been formed, the functions of the inner ear have been found perfect. Scarpi considers the fenestra rotunda as a species of second tympanum. So long, therefore, as the internal ear is sound and healthy, all the essential operations of this organ will proceed.

One practical remark may be permitted us here, on a very common practice. Sir Hans Sloane has observed, 'that among the many people in England who had applied to him on account of deafness, the far greater part were thrown into their complaints by too often picking their ears, and thereby bringing humors, or ulcerous dispositions, on them.'—*Phil. Trans.* No. 246, p. 406.

2. *Of diseases of the meatus auditorius, or external passage of the ear.*—In this passage, and its secretions, arise the most common impediments to hearing. The exact, healthy quantum of cerumen, or wax, which should be here secreted, has never been ascertained. But in a diseased state of this part of the ear the cerumen has been found completely stopping up the passage, and sometimes forming a false tympanum. The cerumen hardened and permanently lodged on the tympanum is a frequent and uniform cause of deafness. The common application of warm water for this accumulation has never been improved upon. This passage is also subject to ulceration, which produces a great thickening of the integuments, and consequent obstruction. The ichor, exuding from the ulcerated surface, inspissates in the passage, and is accompanied with much fœtor. This disease generally yields to the application of solutions of the metallic salts, as of muriated mercury in lime-water; or of vitriolated zinc; or to the use of the unguentum hydrargiri nitratum; calomel, or other alteratives being taken at the same time. (Saunders). Polypous excrescences and other extraneous substances sometimes require to be removed by mechanical means from this passage.

3. *Of diseases or obstructions of the Eustachian tube.*—This forms, in fact, the body of the drum, if we may be allowed the phrase, of which the ear so largely consists. Communicating with the back of the palate, it admits a portion of air to counterbalance that in the meatus, and assists materially, during the vibrations of the tympanum, in perfecting the distinct sensation of sounds. Inveterate deafness is therefore often produced by the disease or obstruction of this organ and its cavity. When air is no longer found here, the tympanum is unduly forced and stretched inward, and thus cannot vibrate as in its perpendicular state.

Obstructions of this tube arise frequently from syphilitic ulcers in the throat, or sloughing in the cynanche maligna. The deafness ensues on the healing of the ulcers, that is, when the obstruction is complete. The descent of a nasal polypus into the pharynx, and enlarged tonsils, have also been known to close the tube. Sometimes the cavity has been found filled with mucus.

The only symptom to which medical men can advert in this case is, that when the patient blows, with his nose and mouth stopped, he does not experience that peculiar sensation, which arises from the inflation of the tympanum. He speaks only of the loss of sense, and complains of no particular symptom. In this respect the deafness differs from all other species.

Sir Astley Cooper has, however, introduced a method of relieving this previously incurable disease of the ear, by puncturing the tympanum. The effect is said to be an instantaneous restorative to the faculty of hearing. But there is some difficulty in keeping open the puncture, which is, in point of fact, to become, in this case, an artificial Eustachian tube. A large hole diminishes the perfection of the returning tension sense, and a small one is perpetually closing. If the membrane also be much lacerated or detached at its circumference, the tension will be lessened; yet even, in these cases, the patient receives an evident benefit.

The instrument, in this operation, is passed through the meatus and the *anterior* or inferior part of the tympanum. The position of the manubrium of the malleus demanding this precaution: a little crack will immediately be heard like that which is occasioned in pricking a common drum, particularly if the tube be entirely closed, as the sound will then be more acute, from the rapid entrance of the air. The instrument must not penetrate far into the tympanum, lest it should pierce its vascular lining; and the escape of blood injure the operation.

4. We come now to the more numerous and important *diseases of the internal ear.*—It is evident that deafness often exists when no apparent cause or morbid affection appears; and that it arises from a nervous insensibility, in some cases, which no surgical aid can remove. The tympanum will appear perfect, and exercise, apparently, its usual functions; and the secretions of the meatus seem healthy. In some cases, complaint is made of great noises in the head, and, as they often correspond with the beating of the pulse, this has been traced to a peculiar perception of the pulsation of the arteries. The organic causes of some of these diseases are even traceable to the brain. Where the deafness has been preceded by local inflammation in the head, evacuants, particularly local ones, are generally prescribed; such as the application of leaches and blisters to the neck and behind the ears; and the general antiphlogistic plan should be pursued more or less, according to the nature of the plerothic symptoms.

Imperfect circulation, on the other hand, and general debility, will sometimes be the cause of deafness; when the usual stimulants of electricity and galvanism have been found effectual, and stimulating liquids may be cauticusly dropped into the ear. In the swelling, or enlargement of neighbouring parts of the head or

neck, through scrophulous or syphilitic affections, these disorders, of course, must be attended to, as the root of the disorganisation.

Mr. Saunders has described, at some length, one of the most common and important diseases, connected both with the external and internal ear; and, at the same time, one of the most common causes of deafness that occur. We mean the puriform discharge, or 'running,' as it is popularly called, from the tympanum. He considers it under three states or stages: 1. A simple puriform discharge. 2. A puriform discharge, complicated with fungi and polypi. 3. A puriform discharge, with a caries of the tympanum. The time of transition from one of these stages to another is quite uncertain. In some instances, years do not affect it; and, in others, it seems to advance, almost at once, to a carious state of the bone.

This puriform discharge from the tympanum, he insists, is a local disease, and does not depend on any disordered state of the constitution: general remedies are, therefore, inefficacious. But, as a bad state of health is unfavorable to the healing of any parts, so, in this particular complaint, any disordered condition of the habit should be corrected. The chief dependence is to be placed on direct applications to the parts affected. Injections of vitriolated zinc, acetate of lead, &c., are very efficacious in suppressing the discharge; and their effects may be aided by the external employment of blisters and setons. The fungous and polypous excrescences must be removed or destroyed by mechanical means; they are only incidental occurrences, and their removal reduces the disease to the first stage.

The deafness during the continuance of this discharge is sometimes very considerable, when the real injury which the organ has sustained is trivial. In the first stage, the mere thickening of parts, or the collection of the discharge, must impede the action of the intervening machinery between the external and internal parts of the ear; and, in the second, the mechanical obstruction of the funguses or polypi excludes the pulses of sound. On this account there is often a remarkable increase of the power of hearing, when the discharge is suppressed in the first and second stages. But as the parts are invisible, it is difficult, if not impracticable, to decide à priori, how far the power of hearing can be restored. This, however, is no valid objection to attempting the cure. The sense will not be rendered worse by a failure; and if the discharge should be stopped, the disease which caused it is removed, the organ safe from farther injury, and the patient freed from an offensive malady. In the last stage, the sense is almost, if not totally, destroyed; and although the discharge be stopped, the patient's hearing will be very little, if at all, improved.

When this disease is cured, the tympanum is exposed to the free ingress and egress of the air, and the mucilaginous discharge inspissates, as the mucus of the nose, by the exhalation of its watery parts. By this accident the patient's deafness increases at intervals, for which he often seeks relief. The practitioner, on sounding the ear, perceives this hardened matter; and conceiving, as is really the case, that it produces the augmentation of deafness, is tempted to remove it. But nothing stimulative, nor any rude attempts, can be safe, for there is great danger of reproducing the discharge. Having learned that a discharge has pre-existed, it will be expedient to leave it to spontaneous separation. *Saunders's Anatomy and Diseases of the Ear.*

This is frequently the disorder of the ear, attended with violent inflammations of the tympanum, and even with delirium; remarkably resembling, in its fluctuations, the tooth-ache, and often popularly but most improperly treated with similar stimulating applications. Parents and individuals who have the care of children cannot be too observant of the nature of frequent discharges from the ear, and should apply early for a good medical opinion as to their cause.

DEAL, *v. a.*, *v. n.* & *n. s.* } Sax. ðæl; Goth. *dail*; Teut. *deil*; Belg. *dælen*, from Gr. διελαν, says Minsheu, to distribute or divide. These are clearly the leading ideas of the word in all its various applications. To separate and distribute in portions; to dispose of in parts; to scatter; to give to different persons. As a neuter verb, to trade; to transact business; and hence, to negociate and mediate an intercourse between different parties; taking various prepositions, as to deal *by*, deal *in*, and deal *with*. As a substantive, it expresses the part or quantity divided or distributed; the act or practice of apportioning out a pack of cards; a plank of fir, divided, split, or sawn out from the tree. A dealer is a trader, or distributer of various commodities for profit. Dealing, the practise of trading, and hence any kind of business, transaction, or intercourse.

DEAL'ER, *n. s.* }
DEAL'ING, *n. s.* }

Deal thy bread to the hungry, and bring the poor that are cast out to thy house. *Isaiah* lviii. 7.

And with the one lamb, a tenth *deal* of flour mingled with the fourth part of an hin of beaten oil. *Exod.* xxix. 40.

The treacherous *dealer dealeth* treacherously, and the spoiler spoileth. *Isaiah* xxi. 2.

He kept his patient a ful great *del*
In houres by his magike naturel.
Chaucer. Prol. to Cant. Tales.

Neither can the Irish, nor yet the English lords, think themselves wronged, nor hardly *dealt* with, to have that which is none of their own given to them. *Spenser's Ireland.*

When men's affections do frame their opinions, they are in defence of errour more earnest, a great *deal*, than, for the most part, sound believers in the maintenance of truth. *Hooker.*

Concerning the *dealings* of men who administer government, and unto whom the execution of that law belongeth, they have their judge, who sitteth in heaven. *Id.*

But this was neither one pope's fault, nor one prince's destiny: he must write a story of the empire, that means to tell of all their *dealings* in this kind. *Raleigh.*

Sometimes he that *deals* between man and man, raiseth his own credit with both, by pretending greater interest than he hath in either. *Bacon.*

It is generally better to *deal* by speech than by letter; and by a man himself, than by the mediation of a third. *Id.*

To weep with them that weep, doth ease some *deal*;
But sorrow flouted at is double death. *Shakspeare.*

Two deep enemies,
Foes to my rest, and my sweet sleep's disturbers,
Are they that I would have thee *deal* upon. *Id.*

What these are!
Whose own hard *dealings* teach them to suspect
The thoughts of others. *Id.*

What a *deal* of cold business doth a man mispend the better part of life in! In scattering compliments, and tendering visits. *Ben Jonson.*

If she hated me, I should know what passion to *deal* with. *Sidney.*

Still in the night she weeps, and her tears fall
Down her cheeks along, and none of all
Her lovers comfort her. Perfidiously
Her friends have *dealt*, and now are enemy.
Donne. On the Lamentat. of Jeremy.

Gentlemen were commanded to remain in the country, to govern the people, easy to be *dealt* with whilst they stand in fear. *Hayward.*

God's gracious *dealings* with men, are the aids and auxiliaries necessary to us in the pursuit of piety. *Hammond.*

Who then shall guide
His people? Who defend? Will they not *deal*
Worse with his followers, than with him they *dealt*?
Milton.

I have also found, that a piece of *deal*, far thicker than one would easily imagine, being purposely interposed betwixt my eye, placed in a room, and the clearer daylight, was not only somewhat transparent, but appeared quite through a lovely red. *Boyle on Colours.*

God did not only exercise this providence towards his own people, but he *dealt* thus also with other nations. *Tillotson.*

They buy and sell, they *deal* and traffic. *South.*

Possibly some never so much as doubted of the safety of their spiritual estate; and, if so, they have so much the more reason, a great *deal*, to doubt of it. *Id.*

One with a broken truncheon *deals* his blows. *Dryden.*

But I will *deal* the more civilly with his two poems, because nothing ill is to be spoken of the dead. *Id.*

Keep me from the vengeance of thy darts,
Which Niobe's devoted issue felt,
When hissing through the skies the feathered deaths were *dealt*. *Id.*

Such an one *deals* not fairly by his own mind, nor conducts his own understanding aright. *Locke.*

With the fond maids in palmistry he *deals*,
They tell the secret which he first reveals. *Prior.*

Reflect on the merits of the cause, as well as of the men who have been thus *dealt* with by their country. *Swift.*

How can the muse her aid impart,
Unskilled in all the terms of art?
Or in harmonious numbers put
The *deal*, the shuffle, and the cut? *Id.*

I find it common with these small *dealers* in wit and learning, to give themselves a title from their first adventure. *Id.*

The Scripture forbids even the countenancing a poor man in his cause; which is a popular way of preventing justice, that some men have *dealt* in, though without that success which they proposed to themselves. *Atterbury.*

Wherever I find a great *deal* of gratitude in a poor man, I take it for granted there would be as much generosity if he were a rich man. *Pope.*

You wrote to me with the freedom of a friend, *dealing* plainly with me in the matter of my own trifles. *Id.*

Among authors, none draw upon themselves more displeasure than those who *deal* in political matters. *Addison.*

The business of mankind, in this life, being rather to act than to know, their portion of knowledge is *dealt* them accordingly. *Id.*

True logick is not that noisy thing that *deals* all in dispute, to which the former ages had debased it. *Watts's Logick.*

How Spain prepares her banners to unfold,
And Rome *deals* out her blessings and her gold.
Tickell.

The nightly mallet *deals* resounding blows.
Gay.

Nature seldom forms an universal genius; but *deals* out her favours in the present state with a parsimonious hand. *Mason.*

I do readily admit that a great *deal* of the wars, seditions, and troubles of the world did formerly turn upon the contention between interests that went by the names of protestant and catholic. *Burke.*

The Goth, the Christian, Time, War, Flood, and Fire
Have *dealt* upon the seven-hilled city's pride;
She saw her glories star by star expire,
And up the steep barbarian monarchs ride,
Where the car climbed the capitol. *Byron.*

DEAL, in carpentry, a thin kind of fir plank, formed by sawing the trunk of a tree into a great many longitudinal divisions, of greater or less thickness according to the purposes it is intended to serve. A good method of seasoning planks for deal, is to throw them into salt water as soon as they are sawed, and keep them there three or four days, frequently turning them. In this case they will be rendered much harder, by drying afterwards in the air and sun; but neither this, nor any other method yet known, will preserve them from shrinking. Rods of deal expand laterally, or cross the grain, in moist weather, and contract again in dry.

DEAL, in geography, a market town and seaport of Kent, between Dover and Sandwich, and supposed to be the Dola of Nennius, and situated on a flat and level coast. The town of Deal, except it may be the sea's shrinking a little from it, is in much the same condition in which it ever was, even from the earliest accounts. Dr. Halley has proved, in his Miscellanea Curiosa, that Julius Cæsar landed here, August 26th, A. A. C. 55. The great conveniency of landing has been of infinite service to the place; so that it is large and populous, divided into the upper and lower towns, adorned with many buildings, and is in effect the principal place on the Downs. To the south of the town is a castle, surrounded by a ditch; it consists chiefly of a round tower, containing apartments for the captain and other officers, and a battery. The batteries and martello towers, constructed during the late war, command from the eminences, every access to the shore. Anchors, cables, &c., are always ready to

supply ships that may need them. It has a very commodious market held on Tuesday and Wednesday, which is well supplied with every kind of provision, &c. It lies seven miles south by east of Sandwich, and seventy-four east by south of London.

DEALBATION, *n. s.* Lat. *dealbatio*. The act of bleaching or making white.

All seed is white in viviparous animals, and such as have preparing vessels, wherein it receives a manifold *dealbation*. *Browne's Vulgar Errours.*

DEAMBULATION, *n. s.* } Lat. *deambula-*
DEA'MBULATORY, *adj.* } *tio*. The act, or relating to the practice, of walking abroad. See AMBULATION.

DEAMENA, in the mythology, the goddess who was supposed to preside over women during their menses.

DEAN, *n. s.* } Fr. *doyen;* Lat. *decanus·*
DEAN'ERY. *n. s.* } 'From the Greek word δεκα,' says Ayliffe, 'in English, ten, because he was anciently set over ten canons or prebendaries at least in some cathedral church.'

The *dean* and canons, or prebends, of cathedral churches, were of great use in the church; they were not only to be of counsel with the bishop for his revenue, but chiefly for government in causes ecclesiastical. Use your best means to prefer such to those places who are nt for that purpose. *Bacon.*

Take her by the hand, away with her to the *deanery*, and dispatch it quickly. *Shakspeare.*

He could no longer keep the *deanery* of the chapel-royal. *Clarendon.*

Put both deans in one; or, if that 's too much trouble,
Instead of the deans make the *deanery* double.
Swift.

DEAN. As there are two foundations of cathedral churches in England, the old and the new (the new are those which Henry VIII., upon suppression of abbeys, transformed from abbot or prior, and convent, to dean and chapter), so there are two means of creating deans; those of the old foundation are appointed to their dignity, much like bishops, the king first issuing his congé d'elire to the chapter, the chapter then choosing, and the bishop confirming, and giving his mandate to install them. Those of the new foundation are, by a shorter course, installed by virtue of the king's letters patent, without election or confirmation. This word is also applied to the chief officers of certain peculiar churches or chapels; as the dean of the king's chapel, the dean of the arches, the dean of St. George's chapel at Windsor, and the dean of Bocking in Essex. The dean and chapter are the council of the bishop, to assist him with their advice in affairs of religion, as well as in the temporal concerns of his see. When the rest of the clergy were settled in the several parishes of each diocese, these were reserved for the celebration of divine service in the bishop's own cathedral; and the chief of them, who presided over the rest, obtained the name of decanus, or dean, being, probably, at first appointed to superintend ten canons or prebendaries. The chapter, consisting of canons or prebendaries, are sometimes appointed by the king, sometimes by the bishop, and sometimes elected by each other. The dean and chapter are the nominal electors of a bishop. The bishop is their ordinary and immediate superior; and has, generally speaking, the power of visiting them, and correcting their excesses and enormities. They had also a check on the bishop at common law; for, till the stat. 32, Hen. VIII. cap. 28, his grant, or lease, would not have bound his successors, unless confirmed by the dean and chapter.

DEAN, in geography, a forest of England, in Gloucestershire, between the Severn and the county of Monmouth. The forest once contained 30,000 acres of land, in which were twenty-three parishes, and four market towns, with great abundance of fine timber. It was reckoned the chief support of the English navy; and the Spanish armada, it is said, was expressly commissioned to destroy it. The iron forges have lessened the quantity of wood, but not consumed it, as care is said to be taken in cutting it. The hills abound in iron ore

DEAN, GREAT DEAN, or MICHAEL DEAN, a town in the above forest, with an elegant church and handsome spire. Cloth and pins are its chief manufactures. It has a market on Monday, and fairs Easter Monday and October 10th. It lies twelve miles west of Gloucester, fifteen of Monmouth, and 120 south-west of London.

DEAN OF GUILD, in Scottish law, the chief judge of a guild-court. The dean of guild in Edinburgh, and most of the royal boroughs of Scotland, is a member of, and elected by, the town-council; ranks next to the bailies, and continues two years in office.

DEAR, *n. s.* & *adj.* } Sax. deop; Belg. *dier;*
DEAR'BOUGHT, *adj.* } Swed. *dyr;* Isl. *dar;* Goth.
DEAR'LING, *n. s.* } *chèr;* from Lat. *carus, careo,* to want, as Minsheu
DEAR'LY, *adv.* } conjectures. One much
DEAR'NESS. *n. s.* } valued or beloved; valuable; beloved; costly; scarce.

They do feed on nectar, heavenly wise,
With Hercules and Hebe, and the rest
Of Venus' *dearlings*, through her bounty blest.
Spenser.

The whole senate dedicated an altar to Friendship, as to a goddess, in respect of the great *dearness* of friendship between them two. *Bacon.*

It is rarely bought, and then also bought *dearly* enough with such a fine. *Id.*

Your brother Glo'ster hates you.
—Oh, no, he loves me, and he holds me *dear*.
Shakspeare.

My brother holds you well, and in *dearness* of heart hath holp to effect your ensuing marriage. *Id.*

That kiss
I carried from thee, *dear*; and my true lip
Hath virgined it e'er since. *Id. Coriolanus.*

Where life is *deare*, who cares for coyned drosse?
That, spent, is counted gaine; and spared, losse.
Bp. Hall. Satires ii. 6.

O fleeting joys
Of Paradise, *dearbought* with lasting woe. *Milton.*

He who hates his neighbour mortally, and wisely too, must profess all the *dearness* of friendship, with readiness to serve him. *South.*

See, my *dear*,
How lavish nature has adorned the year.
Dryden.

Turnus shall *dearly* pay for faith forsworn;
And corps, and swords, and shields, on Tyber born.
Id.

Such *dearbought* blessings happen every day,
Because we know not for what things to pray. *Id.*

These are the pleasing moments, in absence my *dearest* blessing, either to read something from you, or be writing something to you; yet I never do it but I am touched with a sensible regret, that I cannot pour out in words what my heart is so big with, which is much more just to your *dear* self (in a passionate return of love and gratitude) than I can tell you.
Lady Russel's Letters.

Landlords prohibit tenants from plowing, which is seen in the *dearness* of corn. *Swift.*

What made directors cheat the South-sea year?
To feed on ven'son when it sold so *dear*. *Pope.*
And the last joy was *dearer* than the rest. *Id.*

The *dear, dear* name, she bathes in flowing tears,
Hangs o'er the tomb. *Addison's Ovid.*

I was, at the time this compliment was paid me, and am still, much gratified by it. The approbation of such men ever has been, and ever will be, *dearer* to me than the most dignified and lucrative stations in the church. *Bishop Watson.*

How did I hope to vex a thousand eyes!
Oh glorious malice, *dearer* than the prize!
Dr. T. Brown.

DEAR, *adj.* Sax. ðeꝛe, from ðeꝛian, to injure. See DARE. Bitter; hateful; grievous. An obsolete word, but frequently used in this sense by Shakspeare.

Three yere in this wise his lif he ledde,
And bare him so in pees and eke in werre,
Ther n' as no man that Theseus hath *derre*.
Chaucer. Cant. Tales.

What foolish boldness brought thee to their mercies,
Whom thou in terms so bloody, and so *dear*,
Hast made thine enemies?
Shakspeare. Twelfth Night.

Let us return,
And strain what other means is left unto us
In our *dear* peril. *Id. Timon.*

Some *dear* cause
Will in concealment wrap me up a-while:
When I am known aright, you shall not grieve
Lending me this acquaintance. *Id. King Lear.*

Would I had met my *dearest* foe in heaven,
Or ever I had seen that day. *Id. Hamlet.*

The other banished son, with his *dear* sight
Struck pale and bloodless. *Id. Titus Andronicus.*

DEARNLY, *adv.* Sax. dearn. Secret, or deep. See DARN. Here applied to deep and bitter mourning.

At last, as chanced them by a forest side
To pass, for succour from the scorching ray,
They heard a rueful voice, that *dearnly* cried
With piercing shrieks. *Spenser.*

DEARTH, *n. s.* The third person, according to Mr. Tooke, of ðeꝛian, to injure. Minsheu says from Belg. *dier*, dear, and *tiit*, time: a dear time. '*Dyrtid*, as used with the Goths,' says Mr. Thomson, 'a time of dearness.' It is metaphorically applied to the mind.

In times of *dearth*, it drained much coin out of the kingdom, to furnish us with corn from foreign parts.
Bacon.

Pity the *dearth* that I have pined in,
By longing for that food so long a time.
Shakspeare.

Of every tree that in the garden grows,
Eat freely with glad heart; fear here no *dearth*.
Milton.

The French have brought on themselves that *dearth* of plot, and narrowness of imagination, which may be observed in all their plays. *Dryden.*

There have been terrible years *dearths* of corn, and every place is strewed with beggars; but *dearths* are common in better climates, and our evils here lie much deeper. *Swift.*

DEATH, *n. s.*
DEATH-BED,
DEATH'FUL, *adj.*
DEATH'LESS, *adj.*
DEATH-LIKE,
DEATH'S-DOOR,
DEATH'S-HEAD,
DEATH'S-MAN,
DEATH'-WATCH.

Sax. ðeað; Belg. *dood*; Teut. *tod, todt, thot*; from Gr. θανατος, says Minsheu or the Heb. מות, doth. The cessation or extinction of life; the state of the dead; the immediate cause or causer of death; the final perdition of wicked men. A death's man is a public executioner: death's door, a near approach to death. A death-watch is an insect making a ticking noise, like a watch, and supposed to presage death. The other compounds seem to require no explanation.

For the sorrowe that is aftir God worchith penaunce into stidefast heelthe, but sorrow of the worlde worchith *deeth*. *Wiclif.* 2 *Cor.* vii.

They cried out, and said, O thou man of God, there is *death* in the pot. 2 *Kings* iv. 40.

He is the mediator of the New Testament, that by means of *death*, for the redemption of the transgressions, they which are called might receive the promise of eternal inheritance. *Heb.* ix. 15.

Thou shalt die the *deaths* of them that are slain in the midst of the seas. *Ezekiel* xxviii. 8.

We pray that God will keep us from all sin and wickedness, from our ghostly enemy, and from everlasting *death*. *Church Catechism.*

They were adradde of him as of the *deth*.
His wanning was ful fayre upon an *heth*.
Chaucer. Prol. to Cant. Tales.

He answered naught, but in a traunce still lay,
And on those guileful dazed eyes of his
The cloude of *death* did sit. *Spenser. Faerie Queene.*

As in manifesting the sweet influence of his mercy, on the severe stroke of his justice; so in this, not to suffer a man of *death* to live. *Bacon.*

Time itself, under the *deathful* shade of whose wings all things wither, hath wasted that lively virtue of nature in man, and beasts, and plants. *Raleigh.*

In swinish sleep
Their drenched natures lie, as in a *death*.
Shakspeare.

I had rather be married to a *death's head*, with a bone in his mouth, than to either of these. *Id.*

He's dead; I'm only sorry
He had no other *deathsman*. *Id.*

Death, a necessary end,
Will come when it will come.
Id. Julius Cæsar.

Sweet soul, take heed, take heed of perjury;
Thou art on thy *death-bed*. *Id. Othello.*

Life, by this *death* abled, shall controll
Death, whom thy *death* slew; nor shall to me
Fear of first or last *death* bring miserie,
If in thy life's book my name thou enroll.
Donne. Divine Poems.

There was a poor young woman, that had brought herself even to *death's door* with grief for her sick husband. *L' Estrange.*

No blacks, nor soul-bells, nor *death's-heads* on our rings, nor funeral sermons, nor tombs, nor epitaphs, can fix our hearts enough upon our frail and miserable condition. *Bishop Hall. Sermon* 30.

On seas, on earth, and all that in them dwell,
A *deathlike* quiet and deep silence fell. *Waller.*

Blood, death, and *deathful* deeds, are in that noise,
Ruin, destruction at the utmost point. *Milton.*

A *deathlike* sleep!
A gentle wafting to immortal life! *Id.*

God hath only immortality, though angels and human souls be *deathless*. *Boyle.*

I myself knew a person of great sanctity, who was afflicted to *death's-door* with a vomiting.
Taylor's Worthy Communicant.

These are such things as a man shall remember with joy upon his *death-bed*; such as shall cheer and warm his heart, even in that last and bitter agony.
South's Sermons.

He must his acts reveal,
From the first moment of his vital breath,
To his last hour of unrepenting *death*. *Dryden.*

Then round our *death-bed* every friend should run,
And joy us of our conquest early won. *Id. Fables.*

Your cruelty was such, as you would spare his life for many *deathful* torments. *Sidney.*

Faith and hope themselves shall die,
While *deathless* charity remains. *Prior.*

A *death-bed* repentance ought not indeed to be neglected, because it is the last thing that we can do.
Atterbury.

Oft, as in airy rings they skim the heath,
The clam'rous lapwings feel the leaden *death*. *Pope.*
Black Melancholy sits, and round her throws
A *death-like* slumber, and a dread repose. *Id.*
These eyes behold
The *deathful* scene; princes on princes rolled. *Id.*

Misers are muckworms, silkworms beaus,
And *deathwatches* physicians. *Id.*

He caught his *death* the last county-sessions, where he would go to see justice done to a poor widow-woman. *Addison.*

The solemn *deathwatch* clicked the hour she died.
Gay.

We learn to presage approaching death in a family by ravens, and little worms, which we therefore call a *deathwatch*. *Watts.*

Death opens the gate of fame, and shuts the gate of envy after it,—it unlooses the chain of the captive, and puts the bondsman's task into another man's hands. *Sterne.*

Heavens! on my sight what sanguine colours blaze!
Spain's *deathless* shame! the crimes of modern days!
When avarice, shrouded in religion's robe,
Sailed to the west, and slaughtered half the globe.
Darwin.

Ever since the passing of the acts, which punish with *death*, the stealing in shops, or houses, or on board ships, property of certain stated values, juries have, from motives of humanity, been in the habit of frequently finding by their verdicts, that the things stolen were worth much less than had been clearly proved. *Sir S. Romilly.*

Horribly beautiful! but on the verge,
From side to side, beneath the glittering morn,
An Iris sits, amidst the infernal surge,
Like Hope upon a *death-bed*, and, unworn
Its steady dyes, while all around is torn
By the distracted waters. *Byron.*

Death is generally considered as the separation of the soul from the body; in which sense it stands opposed to life, which consists in their union. Physicians have defined death by a total stoppage of the circulation of the blood, and a cessation of the animal and vital functions consequent thereon, as respiration, sensation, &c. The signs of death are in many cases very uncertain. If we consult what Winslow or Bruchier have said on this subject, we shall be convinced, that between life and death the shade is so very undistinguishable, that all the powers of art can scarcely determine where the one ends and the other begins. The color of the visage, the warmth of the body, and the suppleness of the joints, are but uncertain signs of life still subsisting; while, on the contrary, the paleness of the complexion, the coldness of the body, the stiffness of the extremities, the cessation of all motion, and the total insensibility of the parts, are but uncertain marks of death begun. In the same manner also, with regard to the pulse and breathing; these motions are often so small, that it is impossible to perceive them. This ought to be a caution against hasty burials, especially in cases of sudden death, drowning, &c. See Drowning.

Death, in law. The law makes a distinction between natural and civil death. 1. Civil death takes place, where a person is not actually dead, but adjudged so by law. Thus, if any person, for whose life an estate is granted, remains beyond sea, or is otherwise absent, seven years, and no proof of his being alive, he shall be accounted naturally dead. 2. Natural death means a person actually dead.

Death-Watch, in natural history, a species of fermes, so called on account of an old tradition, that its beating or ticking in a sick room, is a sure sign of death. See Fermes.

DEAURATE, *v. a.* & *part. pass.* } Lat. *deauro*. To gild; gilded.
Deauration, *n. s.* }

And while the twilight and the rowis rede
Of Phœbus' light were *deaurat* alike.
Chaucer. Comp. of Black Knight.

DEBACCHATION, *n. s.* Lat. *debacchatio*. A raging; a madness.

DEBAR, *v. a.* From *de* and *bar*. See Bar. To exclude; to preclude; to shut out from any thing; to hinder.

The same boats and the same buildings are found in countries *debarred* from all commerce by unpassable mountains, lakes, and deserts. *Raleigh's Essays.*

Not so strictly hath our Lord imposed
Labour, as to *debar* us when we need
Refreshment, whether food, or talk between,
Food of the mind. *Milton.*

The thread-bare client's poverty
Debarres the atturney of his wonted fee?
Bishop Hall's Satires, v. 3.

Civility, intended to make us easy, is employed in laying chains and fetters upon us, in *debarring* us of our wishes, and in crossing our most reasonable desires. *Swift.*

DEBARB, *v. a.* Lat. from *de* and *barba*. To deprive of his beard.

DEBARK, *v. a.* & *n.* Fr. *debarquer*. To disembark. See EMBARK. Also to strip a tree of its bark.

From hence it appears that the branches of *debarked* oak-trees produce fewer leaf-buds, and more flower-buds, which last circumstance I suppose must depend on their being sooner or later *debarked* in the vernal months. *Darwin.*

DEBASE', *v. a.* DEBAS'ER, *n. s.* DEBASE'MENT. } Old Fr. *debas*, from *de* and *base*. See BASE. To reduce, degrade, adulterate, lessen in strength.

It is a kind of taking God's name in vain, to *debase* religion with such frivolous disputes. *Hooker.*

Words so *debased* and hard, no stone
Was hard enough to touch them on. *Hudibras.*

He reformed the coin, which was much adulterated and *debased* in the times and troubles of king Stephen. *Hale.*

Homer intended to teach, that pleasure and sensuality *debase* men into beasts. *Broome on the Odyssey.*

It is a wretched *debasement* of that sprightly faculty, the tongue, thus to be made the interpreter to a goat or boar. *Government of the Tongue.*

A man of large possessions has not leisure to consider of every slight expense, and will not *debase* himself to the management of every trifle. *Dryden.*

Restraining others, yet himself not free;
Made impotent by power, *debased* by dignity. *Id.*

As much as you raise silver, you *debase* gold; for they are in the condition of two things put in opposite scales; as much as the one rises, the other falls. *Locke.*

He ought to be careful of not letting his subjects *debase* his style, and betray him into a meanness of expression. *Addison.*

DEBATE', *v. a.*, *v. n.* & *n. s.* DEBATE'ABLE, *adj.* DEBA'TER, DEBATE'FUL, DEBATE'MENT. } Fr. *debattre*; Ital. *debatire*, from Lat. *batuo*, to beat. To controvert, dispute, contend for: as a neuter verb to deliberate (taking *on* or *upon*); to dispute. Debateable is disputable; liable or likely to be contended for: a debate, a formal and personal dispute, or controversy.

But God tempride the bodi ghyuynge more worshipe to it to whom it failide, that *debate* be not in the bodi. *Wiclif.* 1 *Cor* 12.

Debate thy cause with thy neighbour himself, and discover not a secret to another. *Proverbs* xxv. 9.

Tho spake our Hoste, A, Sire, ye shuld ben hende,
And curteis, as a man of your estat,
In compagnie we will have no *debat*.
Chaucer. Cant. Tales.

Your several suits
Have been considered and *debated* on.
Shakspeare.

Now, lords, if heaven doth give successful end
To this *debate* that bleedeth at our doors,
We will our youth lead on to higher fields,
And draw no swords but what are sanctified. *Id.*

Without *debatement* further, more or less,
He should the bearers put to sudden death. *Id.*

Have I not vowed for shunning such *debate*,
(Pardon ye Satyres), to degenerate?
And, wading low in this plebeian lake,
That no salt wave shall froath upon my backe.
Bp. Hall. Satires, iv. 4.

The French requested, that the *debatable* ground, and the Scottish hostages, might be restored to the Scots. *Hayward.*

He could not *debate* any thing without some commotion, even when the argument was not of moment. *Clarendon.*

'Tis thine to ruin realms, o'erturn a state;
Betwixt the dearest friends to raise *debate*. *Dryden.*

A way that men ordinarily use, to force others to submit to their judgments, and receive their opinion in *debate*, is to require the adversary to admit what they alledge as a proof, or to assign a better. *Locke.*

He presents that great soul *debating* upon the subject of life and death with his intimate friends. *Tatler.*

It is to diffuse a light over the understanding, in our enquiries after truth, and not to furnish the tongue with *debate* and controversy. *Watts's Logick.*

It is knowledge and experience that make a *debater*. *Chesterfield.*

DEBAUCH', *v. a.* & *n. s.* DEBAUCHEE', *n. s.* DEBAUCH'ER, DEBAUCH'ERY, DEBAUCH'MENT. } Fr. *desbaucher*; from Lat. *debacchor*, to offer sacrifice to Bacchus: anciently written in our language deboise and debosh. To corrupt; to violate; to vitiate, whether by lewdness or intemperance: a fit or habit of intemperance or lewdness. Debauchery, the constant practice of them. A debauchee is one who is himself devoted to lewdness or excess; a debaucher, one who corrupts others, or seduces them into vice.

Here do you keep a hundred knights and squires
Men so disordered, so *debauched*, and bold,
That this our court, infected with their manners,
Shews like a riotous inn. *Shakspeare. King Lear.*

Reason once *debauched*, is worse than brutishness. *Bp. Hall. Contemplations.*

They told them ancient stories of the ravishment of chaste maidens, or the *debauchment* of nations, or the extreme poverty of learned persons. *Taylor's Rule of Holy Living.*

This it is to counsel things that are unjust; first, to *debauch* a king to break his laws, and then to seek protection. *Dryden's Spanish Friar.*

The first physicians by *debauch* were made;
Excess began, and sloth sustains, the trade.
Dryden.

A man must have got his conscience thoroughly *debauched* and hardened, before he can arrive to the height of sin. *South.*

Could we but prevail with the greatest *debauchees* among us to change their lives, we should find it no very hard matter to change their judgments. *Id.*

Oppose vices by their contrary virtues; hypocrisy by sober piety, and *debauchery* by temperance. *Spratt.*

He will for some time contain himself within the bounds of sobriety; till within a little while he recovers his former *debauch*, and is well again, and then his appetite returns. *Calamy.*

No man's reason did ever dictate to him, that it is reasonable for him to *debauch* himself by intemperance and brutish sensuality. *Tillotson.*

Debauched from nature, how can we relish her genuine productions? As well might a man distinguish objects through the medium of a prism, that presents nothing but a variety of colours to the eye, or a maid pining in the green sickness prefer a biscuit to a cinder. *Smollet.*

DEBE'L, *v. a.* } Lat. *debello.* To conDEBE'LLATE, *v. a.* } quer; to overcome in
DEBELLA'TION, *n. s.* } war. Obsolete.

It doth notably set forth the consent of all nations and ages, in the approbation of the extirpating and *debellating* of giants, monsters, and foreign tyrants, not only as lawful, but as meritorious even of divine honour. *Bacon's Holy War.*

Him long of old
Thou didst *debel,* and down from heaven cast
With all his army. *Milton.*

DEBENTURE, *n. s.* } Lat. *debentur,* of
DEBENTURED, *part.* } *debeo,* to owe. A note of debt, generally now used respecting goods entitled to an allowance at the custom-house.

You modern wits, should each man bring his claim,
Have desperate *debentures* on your fame;
And little would be left you, I'm afraid,
If all your debts to Greece and Rome were paid.
Swift.

DEBENTURE is used at the custom-house for a kind of certificate, signed by the officers of the customs, which entitles a merchant, exporting goods, to the receipt of a bounty or draw back. The forms of debentures vary according to the merchandise exported.

DEBI'LITATE, *v. a.* } Lat. *debilito,* of *de*
DEBI'LE, *adj.* } and *habilis,* fit, pro-
DEBILITA'TION, *n. s.* } per. To weaken; make
DEBI'LITY. *n. s.* } unfit for exertion; to emasculate. Debile is weak, enfeebled. The substantives express a confirmed or habitual state of weakness.

I have not washed my nose that bled,
Or foiled some *debile* wretch, which without note
There's many else have done. *Shakspeare.*

Methinks I am partaker of thy passion,
And in thy case do glass mine own *debility.*
Sidney.

The weakness cannot return any thing of strength, honour, or safety to the head, but a *debilitation* and ruin. *King Charles.*

The spirits being rendered languid, are incapable of purifying the blood, and *debilitated* in attracting nutriment. *Harvey on Consumptions.*

In the lust of the eye, the lust of the flesh, and the pride of life, they seemed as weakly to fail as their *debilitated* posterity ever after.
Browne's Vulgar Errours.

Aliment too vaporous or perspirable will subject it to the inconveniencies of too strong a perspiration, which are *debility,* faintness, and sometimes sudden death. *Arbuthnot.*

Thus Conscience pleads her cause within the breast,
Though long rebelled against, not yet suppressed,
And calls a creature formed for God alone,
For Heaven's high purposes, and not his own,
Calls him away from selfish ends and aims,
From what *debilitates* and what inflames.
Cowper. Retirement.

DEBIR, in ancient geography, a sacerdotal city of Palestine, in the southern part of the tribe of Judah, not far from Hebron. It is also called Kirjath-sepher, and Kirjath-sannah. See Josh. xv. 15, 49.

DE-BOIS-BLANC, an island of the United States, belonging to the north-western territory, which was a voluntary gift of the Chippeway Indians, at the treaty of peace, concluded by general Wayne, at Greenville, in 1795.

DEB'ONAIR, *adj.* } Fr. *debonnaire,* proDEBONAIR'LY, *adv.* } bably from *de bon air.* Civil; gentle; courteous; well-bred; gay.

He, in the first flowre of my freshest age,
Betrothed me unto the only haire
Of a most mighty king, most rich and sage;
Was never prince so faithful and so faire,
Was never prince so meek and *debonnaire.*
Spenser. Faerie Queene.

Crying, let be that lady *debonair.* *Id.*

Zephyr met her once a-maying;
Filled her with thee, a daughter fair,
So buxom, blithe, and *debonair.* *Milton.*

The nature of the one is *debonair* and accostable; of the other, retired and supercilious; the one quick and sprightful, the other slow and saturnine.
Howel's Vocal Forest.

And she that was not only passing fair,
But was withal discreet and *debonair,*
Resolved the passive doctrine to fulfil. *Dryden.*

DEBORAH, דְּבֹרָה, Heb.; i.e. a bee; the nurse of Rebecca, whom she accompanied from Padanaram, and survived. She lived in Jacob's family to an advanced age, and died near Bethel, where she was buried under an oak. Gen. xxiv. 59. xxxv. 8.

DEBORAH, a prophetess, poetess, and judge of Israel, who excited Barak to deliver his country from the oppressions of Jabin. See BARAK. Her message to Barak, her reproof for his cowardice, and her song upon the victory, are recorded in Judges iv. & v. She flourished about A. M. 2651.

DEBRUISED, in heraldry, a term peculiar to the English, by which is intimated the restraint of any animal, debarred of its natural freedom, by any of the ordinaries being laid over it. *Argent,* a lion rampant; *or* debruised by a fesse; *gules,* name Charleston.

DEBT, *n. s.* } Old Fr. *debte;* Lat. *de-*
DEBT'ED, *part.* } *bitum,* of *debeo,* to owe.
DEBT'OR, *n. s.* & *adj.* } That which is owed or
DEBT-ROLL, *n. s.* } due to another; obligation. Debted is used by Shakspeare for our modern word indebted. A debtor is he who owes money or any other obligation.

I am *debtor* both to the Greeks and to the Barbarians, both to the wise and to the unwise.
Rom. i. 14.

This worthy man ful wel his wit besette;
Ther wiste no wight that he was in *dette,*
So stedfastly dide he his governance
With his bargeines and with his cheersance.
Chaucer. Prol. Cant. Tales.

There was one that died greatly in *debt*: Well, says one, if he be gone, then he hath carried five hundred ducats of mine with him into the other world.
Bacon's Apothegms.

Your son, my lord, has paid a soldier's *debt*;
He only lived but till he was a man,
But like a man he died. *Shakspeare. Macbeth.*

Which do amount to three odd ducats more
Than I stand *debted* to this gentleman. *Shakspeare.*

I'll bring your latter hazard back again,
And thankfully rest *debtor* for the first. *Id.*

Like to a merchant's *debt-role* new defac't,
When some cracked manour crost his books at last
Bp. Hall's Satires, iv. 1.

To this great loss a sea of tears is due;
But the whole *debt* not to be paid by you.
Waller.

The fashion of imperial grandeur is imitated by all inferior and subordinate sorts of it, as if it were a point of honour. They must be cheated of a third part of their estates; two other thirds they must expend in vanity; so that they remain *debtors* for all the necessary provisions of life, and have no way to satisfy those *debts*, but out of the succours and supplies of rapine. *Cowley.*

Swift, a thousand pounds in *debt*,
Takes horse, and in a mighty fret
Rides day and night. *Swift.*

An atheist is but a mad ridiculous derider of piety; but a hypocrite makes a sober jest of God and religion; he finds it easier to be upon his knees than to rise to a good action: like an impudent *debtor*, who goes every day to talk familiarly to his creditor, without ever paying what he owes. *Pope.*

When I look upon the *debtor* side, I find such innumerable articles, that I want arithmetick to cast them up: but when I look upon the creditor side, I find little more than blank paper. *Addison.*

If he his ample palm
Could haply on ill-fated shoulder lay
Of *debtor*, strait his body, to the touch
Obsequious, as whilom knights were wont,
To some enchanted castle is conveyed. *Philips.*

Let him who sleeps too much, borrow the pillow of a *debtor*. *A Spanish Proverb, quoted by Johnson.*

DEBT, NATIONAL. See FUNDS, and NATIONAL DEBT.

DEBULLI'TION, *n. s.* Lat. *debullitio*. A bubbling or seething over.

DECACU'MINATED, *adj.* Lat. *decacuminatus*. Having the top cut off.

DECA'DE, *n. s.* } Gr. δεκας; Lat. *decas*
DECAGON. *n. s.* } The sum of ten; a number containing ten. A decagon (adding γωνια, a corner), is a figure in plane geometry, containing ten sides and angles.

Men were not only out in the number of some days, the latitude of a few years, but might be wide by whole olympiads, and divers *decades* of years.
Browne's Vulgar Errours.

We make cycles and periods of years; as, *decades* centuries, and chiliads, chiefly for the use of computations in history, chronology, and astronomy.
Holder on Time.

All ranked by ten; whole *decades*, when they dine,
Must want a Trojan slave to pour the wine. *Pope.*

DECA'DENCY, *n. s.* Fr. *decadence*. Decay; fall. See DECAY.

DECAGYNIA, from δικα, ten, and γυνη, a woman, an order in the class decandria, consisting of plants, whose flowers are furnished with ten stamina, and the same number of styles. See BOTANY.

DE'CALOGUE, *n. s.* Gr. δεκαλογος. The ten commandments given by God to Moses.

The commands of God are clearly revealed both in the *decalogue* and other parts of sacred writ.
Hammond.

DECALOGUE, in theology, the ten commandments, which were engraved by God on two tables of stone. The Jews, by way of eminence, call these commandments, after Deut. x. 4, the ten words, from whence they had afterwards the name of decalogue. The church of Rome has, in some catechisms, united the second commandment, in an abridged form, with the first; and, to make their number complete, has divided the tenth into two. The reason is obvious. See Stillingfleet's Works, vol. vi. It should, in fairness, however, be added, that Jews, as well as Christians, have divided the commandments differently

DECA'MP, *v. n.* } Fr. *decamper*. To shift
DECA'MPMENT, *n. s.* } the camp; to move off. The act of shifting the camp.

The king of Portugal would *decamp* on the twenty-fourth in order to march upon the enemy. *Tatler.*

DECA'NT, *v. a.* }
DECA'NTER, *n. s.* } Fr. *decanter*; Lat. *decanto*. To pour off gently
DECANTA'TION. } by inclination. A decanter is a vessel made for receiving wine perfectly clear.

Take aqua fortis and dissolve it in ordinary coined silver, and pour the coloured solution into twelve times as much fair water, and then *decant* or filtrate the mixture, that it may be very clear. *Boyle.*

They attend him daily as their chief,
Decant his wine, and carve his beef. *Swift.*

DECANUS, in Roman antiquity, an officer who presided over the ten officers, and was head of the contubernium, or serjeant of a file of soldiers.

DECA'PITATE, *v. a.* } Lat. *decapito*. To
DECAPITATION. *n. s.* } behead. A beheading, or DECOLLATION, which see.

DECAPOLIS, in ancient geography, a district beyond Jordan, almost wholly belonging to the half tribe of Manasseh; before the captivity, called Bethsan; but after, occupied by heathens. It comprises, as the name denotes, ten principal cities on the other side of the Jordan, except Scythopolis, which stood on this side, but its territory lay on the other.

DECAPROTI, DECEMPRIMI, in Roman antiquity, officers for gathering the taxes. The decaproti were also obliged to pay for the dead, or to answer to the emperor, for the quota parts of such as died out of their own estates.

DECASPERMUM, in botany, a genus of the monogynia order and icosandria class of plants: CAL. perianth turbinated, quinquefid at the apex: COR. five roundish petals. The stamina are many filiform filaments, a little shorter than the corolla: PERICARP. is a dry, globular, decemlocular berry, with solitary egg-shaped seeds.

DECASTYLE, in the ancient architecture, a building, with an ordnance of ten columns in front, as the temple of Jupiter Olympius was.

DECA'Y, *v. a.*, & *n.* & *n. s.* } Fr. *decheoir;*
DECAYER, *n. s.* } from Lat. *de* and *cado*. To impair; to make less in value; to decline; to lose excellence; to be impaired.

And if thy brother be waxen poor, and fallen in *decay* with thee, then thou shalt relieve him. *Levit.* xxv. 35.

Cut off a stock of a tree, and lay that which you cut off to putrefy, to see whether it will *decay* the rest of the stock. *Bacon.*

Infirmity, that *decays* the wise, doth ever make better the fool. *Shakspeare.*

I am the very man
That, from your first of difference and *decay*,
Have followed your sad steps. *Id. King Lear.*

Your water is a sore *decayer* of your whorson dead body. *Id. Hamlet.*

She has been a fine lady, and paints and hides
Her *decays* very well. *Ben Jonson.*

And those *decays*, to speak the naked truth,
Through the defects of age, were crimes of youth. *Denham.*

He was of a very small and *decayed* fortune, and of no good education. *Clarendon.*

In Spain our springs, like old men's children, be *Decayed* and withered from their infancy. *Dryden.*

The monarch oak,
Three centuries he grows, and three he stays
Supreme in state, and in three more *decays*. *Dryden.*

By reason of the tenacity of fluids, and attrition of their parts, and the weakness of elasticity in solids, motion is much more apt to be lost than got, and is always upon the *decay*. *Newton.*

Each may feel increases and *decays*,
And see now clearer and now darker days. *Pope.*

Now kindred merit fills the sable bier,
Now lacerated friendship claims a tear;
Year chases year, *decay* pursues *decay*,
Still drops some joy from withering life away.
Johnson. Vanity of Human Wishes.

Alas! the lofty city! and alas!
The trebly hundred triumphs! and the day
When Brutus made the dagger's edge surpass
The conqueror's sword in bearing fame away!
Alas, for Tully's voice, and Virgil's lay,
And Livy's pictured page!—but these shall be
Her resurrection; all beside—*decay*. *Byron*

DECCAN, or the Country of the South, an extensive region of Hindostan, bounded on the north by the Narbuddah, and on the south by the Krishna, or Kistnah river, extending across the peninsula from sea to sea. It was possessed, in former times, by the rajah of Telingana, and the Hindoo princes, and first invaded by the Mahommedans in 1293. They plundered the city of Deoghir, now called Dowlatabad, and the Tagara of Ptolemy. In the year 1306 the city and fortress were taken, and the rajah, Ram Deo, carried to Delhi. In 1323, Warunkul, the capital of Telingana, was also taken by the Mahommedans, and the Hindoo dynasty overthrown. For some time the Deccan remained subject to Delhi, till the governor having rebelled, laid the foundation of an independent state, under the title of the Bhamenee sultans, whose capital was Kalberga; this was in 1347. The Bhamenee dynasty, consisting of fourteen persons, continued till the year 1518. On the dissolution of this empire, the Deccan was subdivided into the five following states: the Adil Shahy, or Bejapore kingdom; the Kootub Shahy, or Golconda; the Nizam Shahy, or Ahmednagur; the Ummaud Shahy, or Berar; the Beered Shahy, or Beeder.

During the reign of Aurungzebe, all these states were reduced, and the Deccan again annexed to the kingdom of Delhi. It was then divided into six governments, viz. Khandesh, Ahmednagur, Beeder, Golconda, Bejapore, and Berar. In subsequent reigns, these governments came under the superintendance of the Nizam, who, taking advantage of the weak state of the court of Delhi, after the Persian invasion in 1739, threw off his allegiance, became independent, and fixed his court at Hyderabad. The Mahrattas, however, were now rising into power, and the nizam was obliged to cede to them the territorities now constituting the dominions of the peishwa.

DECEASE, *v. n.* & *n. s.* Lat. *decedo, decessus*, from *de* and *cado*, to fall. To die; to quit life: death.

He tells us Arthur is *deceased* to-night. *Shakspeare.*

Lands are by human law, in some places, after the owner's *decease*, divided unto all his children; in some, all descendeth to the eldest son. *Hooker.*

You shall die
Twice now, where others, that mortality
In her fair arms holds, shall but once *decease*. *Chapman.*

His latest victories still thickest came,
As, near the centre, motion doth increase;
Till he, pressed down by his own weighty name,
Did, like the vestal, under spoils *decease*. *Dryden.*

DECEIT', *n. s.* } Old Fr. *decepte;* Lat.
DECEIT'FUL, *adj* } *deceptus;* of *de* and
DECEIT'FULLY, *adv.* } *capio, captus*, to take.
DECEIT'FULNESS, *n. s.* } A taking by fraud; a fallacy; a cheat: deceitful is, fraudulent in any degree: deceitfulness, tendency to deceive.

My lips shall not speak wickedness, nor my tongue utter *deceit*. *Job* xxvii. 4.

The care of this world, and the *deceitfulness* of riches, choke the word, and he becometh unfruitful. *Matt.* xii. 22.

His demand
Springs not from Edward's well-meant honest love,
But from *deceit*, bred by necessity. *Shakspeare.*

I grant him bloody,
Luxurious, avaricious, false, *deceitful*. *Id.*

Exercise of form may be *deceitfully* dispatched of course. *Wotton.*

Those, which are plain-hearted in themselves, are the bitterest enemies to *deceit* in others. *Bp. Hall's Contemplations.*

Outward appearances are *deceitful* guides to our judgment, or affections. *Id.*

The lovely young Lavinia once had friends,
And fortune smiled, *deceitfull* on her birth. *Thomson.*

Human nature is the same now as it was then: the heart as *deceitful*: and the necessity of watching, knowing, and keeping it, the same. *Mason.*

He, who still expects *deceit*,
Only teaches how to cheat. *Johnson's Poems.*

A true artist should put a generous *deceit* on the spectators, and effect the noblest designs by easy methods. *Burke.*

DECEIVE', *v. a.* DECEIV'ABLE, *adj.* DECEIV'ABLENESS, *n. s.* DECEIV'ER, DECEIV'ING. *part.* } French, *decevoir*; Lat. *decipio*, from *de* and *capio*. See DECEIT. To delude, cheat, deprive by fraud; hence to mislead, guide into error, whether by design or otherwise. Deceivable is used both for fraudulent, and for being liable or particularly exposed to fraud. Deceivableness also expresses both artfulness, and a liableness to be deceived.

For synne through occasioun taken bi the commaundement *disseyuyde* me, and bi that it slough me. *Wiclif. Romayns* vii.

Be not borun aboute with ech wynd of techyng in the weiwardnesse of men in sutil witt to the *disseyuyng* of errowr. *Id. Effesies* 4.

With all *deceivableness* of unrighteousness 2 *Tim.* ii. 10.

Sporting themselves with their own *deceivings*, while they feast with you. 2 *Pet.* ii. 13.

It is no wonder thing though it be so;
A lousy jogelour can *deceiven* thee,
And parde yet can I more craft than he.
Chaucer. Cant. Tales.

Wine is to be forborne in consumptions, for that the spirits of the wine prey upon the viscid juice of the body intercommon with the spirits of the body, and so *deceive* and rob them of their nourishment. *Bacon.*

It is good to consider of deformity, not as a sign, which is more *deceivable*, but as a cause which seldom faileth of the effect. *Id.*

As for Perkin's dismission out of France, they interpreted it not as if he were detected for a counterfeit *deceiver*. *Id.*

Sigh no more, ladies, sigh no more;
Men were *deceivers* ever:
One foot in sea, and one on shore;
To one thing constant never. *Shakspeare.*

They are worthy to be *deceived* that value things as they seem. *Bishop Hall. Contemplations.*

He received nothing but fair promises, which proved *deceivable*. *Hayward.*

O ever failing trust
In mortal strength! and oh, what not in man
Deceivable and vain? *Milton.*

Man was not only *deceivable* in his integrity, but the angels of light in all their clarity. *Browne's Vulgar Errours.*

How happy he that loves not, lives!
Him neither hope nor fear *deceives*
To fortune who no hostage gives. *Denham.*

They raised a feeble cry with trembling notes,
But the weak voice *deceived* their gasping throats.
Dryden.

Those voices, actions, or gestures, which men have not by any compact agreed to make the instruments of conveying their thoughts one to another, are not the proper instruments of *deceiving*, so as to denominate the person using them a liar or *deceiver*. *South.*

Some have been *deceived* into an opinion, that there was a divine right of primogeniture to both estate and power. *Locke.*

Adieu the heart-expanding bowl,
And all the kind *deceivers* of the soul. *Pope.*

He that has a great patron, has the advantage of his negligence and *deceivableness*. *Government of the Tongue.*

By thus disguising our motives, we may impose upon men; but at the same time we impose upon ourselves: and, whilst we are *deceiving* others, our own hearts *deceive* us: and, of all impostures, self-*deception* is the most dangerous, because least suspected. *Mason.*

I have not loved the world, nor the world me;
But let us part fair foes: I do believe,
Though I have found them not, that there may be
Words which are things,—hopes which will not *deceive*,
And virtues which are merciful, nor weave
Snares for the failing. *Byron.*

DECE'MBER, *n. s.* Lat. *december*. The last month of the year, named *december*, or the *tenth* month, when the year began in March.

What should we speak of
When we are old as you? When we shall hear
The rain and wind beat dark *December*. *Shakspeare.*

Men are April when they woo, and *December* when they wed. *Id. As You Like It.*

DECEMBER is the month wherein the sun enters the tropic of Capricorn, and makes the winter solstice. Among the ancient Romans, December was under the protection of Vesta. Romulus assigned it thirty days, Numa reduced it to twenty-nine, which Julius Cæsar increased to thirty-one. In the reign of Commodus this month was called, by way of flattery, Amazonius, in honor of a courtezan, whom that prince passionately loved, and had painted like an Amazon; but this name died with that tyrant. At the end of December they had the juveniles ludi; and the country people kept the feast of the goddess Vacuna in the fields, having then gathered in their fruits, and sown their corn; whence seems to be derived our popular festival called harvest-home.

DECEMPEDA, *δικαπους*, from *decem*, ten, and *pes*, a foot; ten-feet rod, an instrument used by the ancients in measuring. It was a rule, or rod, divided into ten feet; the foot was subdivided into twelve inches, and each inch into ten digits. The decempeda was used both in measuring land, like the chain among us; and by architects, to give the proper dimensions and proportions to the parts of their buildings, which use it still retains.

DECE'MPEDAL, *adj.* Lat. *decempeda*; from Gr. *δεκας*. Ten feet in length.

DECEMVIRI, ten magistrates of absolute authority among the Romans. The privileges of the patricians raised dissatisfaction among the plebeians; who, though freed from the power of the Tarquins, still saw that the administration of justice depended upon the will and caprice of their superiors; and it was at length agreed, that ten new magistrates, called decemviri, should be elected from the senate, to put the project into execution. Their power was absolute, all other offices ceased after their election, and they presided over the city with regal authority. They were invested with the badges of the consul, in the enjoyment of which they succeeded by turns; and only one was preceded by the fasces, and had the power of assembling the senate, and confirming decrees. The first decemviri were, Appius Claudius, T. Genutius, P. Sextus, Sp. Veturius, C. Julius, A. Manlius, Ser. Sulpitius, Pluriatius, T. Romulus, and Sp. Posthumius; A. U. C. 302. Under them the

laws, which had been exposed to public view, were publicly approved of as constitutional, and ratified by the priests and augurs, in the most solemn manner. They were ten in number, and were engraved on tables of brass; two were afterwards added, whence they were called the laws of the twelve tables, leges XII tabularum, and leges decemvirales. The decemviral power, which was at first beheld by all ranks of people with the greatest satisfaction, was continued; but in the third year after their creation, the decemviri became odious on account of their tyranny; and the attempt of Ap. Claudius to ravish Virginia totally abolished the office. Consuls were again appointed, and tranquillity re-established in the state. There were other officers in Rome called decemviri, who were originally appointed in the absence of the prætor, to administer justice. Their appointment became afterwards necessary, and they generally assisted at sales, called subhastationes, because a spear, hasta, was fixed at the door of the place where the goods were exposed to sale. They were called decemviri litibus judicandis. The officers, whom Tarquin appointed to guard the Sybilline books, were also called decemviri. They were originally two in number, called duumviri, till A.U.C. 388, when their number was increased to ten, five of whom were chosen from the plebeians and five from the patricians. Sylla increased their number to fifteen, hence called quindecemvirs.

DE'CENCE, or DE'CENCY, *n. s.* DE'CENT, *adj.* DE'CENTLY. *adv.* Fr. *decence*; Lat. *decet*, it becometh. Propriety of form or manner, principally the latter; modesty. Decent is, becoming; fit; suitable; and hence sometimes applied to that which is grave or formal.

Come, pensive nun, devout and pure,
Sober, stedfast, and demure,
All in a robe of darkest grain
Flowing with majestick train,
And sable stole of Cyprus lawn
O'er the *decent* shoulders drawn. *Milton.*

Those thousand *decencies* that daily flow
From all her words and actions. *Id.*

They could not *decently* refuse assistance to a person, who had punished those who had insulted their relation. *Broome.*

And must I own, she said, my secret smart,
What with more *decence* were in silence kept?
Dryden.

Since there must be ornaments both in painting and poetry, if they are not necessary, they must at least be *decent*; that is, in their due place, and but moderately used. *Id.*

Past hope of safety, 'twas his latest care,
Like falling Cæsar, *decently* to die. *Id.*

The consideration immediately subsequent to the being of a thing, is what agrees or disagrees with that thing; what is suitable or unsuitable to it; and from this springs the notion of *decency* of indecency, that which becomes or misbecomes. *South.*

In good works there may be goodness in the general: but *decence* and gracefulness can be only in the particulars in doing the good. *Sprat.*

Immodest words admit of no defence;
For want of *decency* is want of sense. *Roscommon.*

Performed what friendship, justice, truth require,
What could he more, but *decently* retire? *Swift.*

Were the offices of religion stript of all the external *decencies* of worship, they would not make a due impression on the minds of those who assist at them. *Atterbury.*

She speaks, behaves, and acts just as she ought;
But never, never reached one generous thought;
Virtue she finds too painful an endeavour,
Content to dwell in *decencies* for ever. *Pope.*

Sentiments which raise laughter, can very seldom be admitted with any *decency* into an heroick poem. *Addison.*

Give every bishop income enough, not for display of wordly pomp and fashionable luxury, but to enable him to maintain works of charity, and to make a *decent* provision for his family. *Bishop Watson.*

DECE'NNIAL, *adj.* From Lat. *decennium*. Continuing for the space of ten years.

DECENNALIA, ancient Roman festivals, celebrated by the emperors every tenth year of their reign, with sacrifices, games, and largesses for the people. Augustus first instituted these solemnities, in which he was imitated by his successors.

DECENNO'VAL, *adj.* DECENNO'VARY Lat. *decem* and *novem*. Relating to the number nineteen.

Meton, of old, in the time of the Peloponnesian war, constituted a *decennoval* circle, or of nineteen years; the same which we now call the golden number. *Holder.*

Seven months are retrenched in this whole *decennovary* progress of the epacts, to reduce the accounts of her motion and place to those of the sun. *Id.*

DECE'PTION. *n. s.* DECEPTIBI'LITY, DECE'PTIBLE, *adj.* DECE'PTIOUS, DECE'PTIVE, DECE'PTORY. From Lat. *deceptio*. See DECEIT. Fraud; the act or means of fraud. Deceptibility, and deceptible, express a liableness to imposture; deceptious and deceptive, the power or design of deceiving. Deceptory, says Dr. Johnson, is, containing means of deceit.

Yet there is a credence in my heart,
That doth invert the' attest of eyes and ears;
As if those organs had *deceptious* functions,
Created only to calumniate. *Shakspeare.*

Reason, not impossibly, may meet
Some spacious object by the foe suborned,
And fall into *deception* unaware. *Milton.*

The first and father cause of common errour, is the common infirmity of human nature; of whose *deceptible* condition, perhaps, there should not need any other eviction, than the frequent errours we shall ourselves commit. *Browne.*

Being thus divided from truth in themselves, they are yet farther removed by advenient *deception*. *Id.*

All *deception* is a misapplying of those signs, which, by compact or institution, were made the means of men's signifying or conveying their thoughts. *South.*

Some errours are so fleshed in us, that they maintain their interest upon the *deceptibility* of our decayed natures. *Glanville.*

DECE'RPT, *adj.* DECE'RPTIBLE, *adj.* DECE'RPTION, *n. s.* Lat. *decerptus*. Cropped; taken off. That which may be, or is taken off; the act of taking off.

If our souls are *decerptions* of our parents, then I must have been guilty of all the sins that ever were committed by my progenitors ever since Adam. *Glanville.*

DECERTA'TION, *n. s.* Lat. *decertatio.* A contention; a striving; a dispute.

DECE'SSION, *n. s.* Lat. *decessio.* A departure; a going away.

DECHA'RM, *v. a.* Fr. *decharmer.* To counteract a charm; to disenchant.

Notwithstanding the help of physick, he was suddenly cured by *decharming* the witchcraft. *Harvey.*

DECI'DE, *v. a.* & *v. n.* Fr. *decider*; Ital. *decidere*; Lat. *decido*, from *de* and *cædo*, or *scindo*. To cut short a controversy, says Minsheu. To fix an event or issue; to determine.
DECI'DEDLY, *adv.*
DECI'DER, *n. s.*
DECIS'ION,
DECIS'IVE, *adj.*
DECIS'IVELY, *adv.*
DECIS'IVENESS, *n. s.*
DECIS'ORY.

A decider is a judge of controverted matters. Decision, the act or habit of determining, and sometimes of determining promptly. Decisory, able to determine.

The time approaches,
That will with due *decision* make us know
What we shall say we have, and what we owe.
Shakspeare.

Pleasure and revenge
Have ears more deaf than adders to the voice
Of any true *decision.* *Id.*

The day approached, when fortune should *decide*
The important enterprise, and give the bride.
Dryden.

Their arms are to the last *decision* bent,
And fortune labours with the vast event. *Id.*

In council oft, and oft in battle tried,
Betwixt thy master and the world *decide.*
Granville.

The man is no ill *decider* in common cases of property, where party is out of the question. *Swift.*

Such a reflection, though it carries nothing perfectly *decisive* in it, yet creates a mighty confidence in his breast, and strengthens him much in his opinion. *Atterbury.*

War is a direct appeal to God for the *decision* of some dispute, which can by no other means be determined. *Id.*

Who shall *decide*, when doctors disagree,
And soundest casuists doubt? *Pope.*

I cannot think that a jester or a monkey, a droll or a puppet, can be proper judges or *deciders* of controversy. *Watts.*

For on the event,
Decisive of this bloody day, depends
The fate of kingdoms. *Philips.*

I never troubled myself with answering any arguments which the opponents in the divinity-schools brought against the articles of the church, nor ever admitted their authority as *decisive* of a difficulty; but I used on such occasions to say to them, holding the New Testament in my hand, 'En sacrum codicem!' *Bp. Watson.*

DE'CIDENCE, *n. s.* Lat. *decidentia.* The quality of being shed, or of falling away; the act of falling away.

Men observing the *decidence* of their horn, do fall upon the conceit that it annually rotteth away, and successively reneweth again. *Browne's Vulgar Errours.*

DECI'DUOUS, *adj.* Lat. *deciduus.* Falling; not perennial; not lasting through the year.
DECI'DUOUSNESS, *n. s.*

In botany, the perianthium, or calyx, is *deciduous*, with the flower. *Quincy.*

DECIL, in astronomy, an aspect or position of two planets, when they are distant from each other a tenth part of the zodiac.

DE'CIMAL, *adj.* Lat. *decimus.* Numbered or multiplied by ten.

In the way we take now to name numbers by millions of millions of millions, it is hard to go beyond eighteen, or, at most, four-and-twenty *decimal* progressions, without confusion. *Locke.*

DECIMAL ARITHMETIC, the art of computing by decimal fractions. See ARITHMETIC, Index.

DE'CIMATE, *v. a.* Lat. *decimus.* To tithe; to take the tenth; a tithing; a selection by lot of every tenth soldier, in a general mutiny, for punishment.
DECIMA'TION, *n. s.*

By *decimation* and a tithed death,
Take thou the destined tenth. *Shakspeare.*

A *decimation* I will strictly make
Of all who my Charinus did forsake;
And of each legion each centurion shall die.
Dryden.

DECIMATION was a punishment inflicted by the ancient Romans, on such soldiers as quitted their posts, or behaved themselves cowardly in the field. The names of the guilty were put into an urn, or helmet, and as many were drawn out as made the tenth part of the whole number, and those were put to the sword, and the others saved. The ancient Roman militia, to punish whole legions when they had failed in their duty, made the soldiers draw lots, and put every tenth man to death for an example. The Romans had also the vicesimatio, and even centisimatio, when only the twentieth or hundredth man suffered by lot.

DECI'PHER, *v. a.* Fr. *dechiffrer*, from *de* and *cipher.* See CIPHER. To explain that which is written in ciphers; hence to unfold; to explain; to write out.

Zelmane, that had the same character in her heart, could easily *decipher* it. *Sidney.*

Assurance is writ in a private character, not to be read, nor understood, but by the conscience, to which the Spirit of God has vouchsafed to *decipher* it. *South.*

Could I give you a lively representation of guilt and horrour on this hand, and point out eternal wrath and *decipher* eternal vengeance on the other, then might I shew you the condition of a sinner hearing himself denied by Christ. *Id.*

Then were laws of necessity invented, that so every particular subject might find his principal pleasure *deciphered* unto him, in the tables of his laws. *Locke.*

DECIPHERING, the art of reading or explaining ciphers. See CIPHER.

DECIUS (Cn. Metius), a native of Pannonia, sent by the emperor Philip, to appease a sedition in Mœsia. Instead of obeying his master's command, he assumed the imperial purple, and soon after marched against him, and, at his death, became the only emperor. He signalised himself against the Persians; but when he marched against the Goths, he pushed his horse

into a deep marsh, from which he could not extricate himself, and perished, with all his army, by the darts of the barbarians, A. D. 251, after a reign of two years.

Decius Mus, the name of three patriotic Romans, viz. 1. a celebrated consul, who, after many glorious exploits, devoted himself to the gods manes, for the safety of his country, in a battle against the Latins, about 340 years before the Augustan age. 2. His son, Decius Mus, imitated his example, and devoted himself, in like manner, in his fourth consulship, when fighting against the Gauls and Samnites. 3. His grandson also did the same in the war against Pyrrhus and the Tarentines.

DECK, *v. a.* & *n. s.* } Sax. ᵹecan, ðecan;
De'cker, *n. s.* } Bel. *decken*, from Lat. *tego*, *tectum*. To cover; to adorn; ornament; dress. A deck is the covering of a ship's hold.

His goodly image, liuing euermore
In the diuine resemblaunce of your face,
Which with your vertues ye embellish more,
And natiue beauty *deck* with heuenlie grace.
Spenser. Sonnets.

We have also raised our second *decks*, and given more vent thereby to our ordnance, trying on our nether overloop. *Raleigh.*

Sweet ornament! that *decks* a thing divine.
Shakspeare.

Long may'st thou live to wail thy children's loss,
And see another, as I see thee now,
Decked in thy rights, as thou art stalled in mine.
Id.

Her keel plows hell,
And *deck* knocks heaven. *Ben Jonson.*

The ruder Satyre should go ragged and bare,
And show his rougher and his hairy hide,
Tho' mine be smooth, and *deckt* in carelesse pride.
Bp. Hall. Defiance to Envy.

Ye mists and exhalations, that now rise
From hill or steaming lake, dusky or grey,
Till the sun paint your fleecy skirts with gold;
In honour to the world's great Author, rise!
Whether to *deck* with clouds the uncoloured sky,
Or wet the thirsty earth with falling showers,
Rising or falling, still advance his praise. *Milton.*

Now the dew with spangles *decked* the ground,
A sweeter spot of earth was never found. *Dryden.*

At sun-set to their ship they make return,
And snore secure on *decks* till rosy morn.
Id. Æneid.

If any, born and bred under *deck*, had no other information but what sense affords, he would be of opinion that the ship was as stable as a house.
Glanville.

Besides gems, many other sorts of stones are regularly figured: the amianthus, of parallel threads, as in the pile of velvet; and the selenites, of parallel plates, as in a *deck* of cards. *Grew.*

It was intended by the means of these precepts, not to *deck* the mind with ornaments, but to protect it from nakedness; not to enrich it with affluence, but to supply it with necessaries.
Johnson. Preface to Preceptor.

Deck, the planked floors of a ship, which connect the sides together, and serve as different platforms to support the artillery and lodge the men; as also to preserve the cargo from the sea, in merchant-vessels. As all ships are broader at the lower deck than on the next above it, and as the cannon thereof are always heaviest, it is necessary that the frame of it should be much stronger than that of the others; and, for the same reason, the second, or middle-deck, ought to be stronger than the upper-deck or forecastle. Ships of the first and second rates are furnished with three whole decks, reaching from the stem to the stern, besides a forecastle and a quarter-deck, which extends from the stern to the main-mast; between which and the forecastle, a vacancy is left in the middle, opening to the upper deck, and forming what is called the waist. The inferior ships of the line-of-battle are equipped with two decks and a-half; and frigates, sloops, &c. with one gun-deck and a-half, with a spar-deck below to lodge the crew. The decks are formed and sustained by the beams, the clamps, the water-ways, the carlings, the ledges, the knees, and two rows of small pillars, called stanchions, &c. See Ship-Building.

Deck, Flush, implies a continued floor laid from stem to stern, upon one line, without any stops or intervals.

Deck, Half, a space under the quarter-deck of a ship of war, contained between the foremost bulk-head of the steerage and the forepart of the quarter-deck. In the colliers of Northumberland, the steerage itself is called the half-deck, and is usually the habitation of the crew.

DECKENDORF, a town of Bavaria, near the Danube. In the year 1633 it was taken by the troops of the duke of Saxe-Weimar, and retaken by the Swedes in 1641. It is twenty-eight miles north-west of Passau, and thirty-eight E.S.E. of Ratisbon. Long. 12° 55′ E., lat. 46° 50′ N.

DECLA'IM, *v. a.* & *n.* } Fr. *declamer*; Ital. *declamatore*; of Lat. *declamo*, from *de* and *clamo*, to call aloud.
Decla'imer, *n. s.*
Decla'iming, *n. s.*
Declama'tion,
Decla'matory, *adj.*
—To harangue; to speak with formality or vehemence; to address the passions rather than the judgment. Sometimes a college theme or composition is termed particularly, a declamation.

The cause why *declamations* prevail so greatly, is, for that men suffer themselves to be deluded.
Hooker.

What are his mischiefs, consul? You *declaim*
Against his manners, and corrupt your own.
Ben Jonson.

This a while suspended his interment, and became a *declamatory* theme amongst the religious men of that age. *Wotton.*

Thou mayest forgive his anger, while thou makest use of the plainness of his *declamation*. *Taylor.*

He has run himself into his own *declamatory* way, and almost forgotten that he was now setting up for a moral poet. *Dryden.*

The splendid *declaimings* of novices and men of heat.
South.

It is usual for masters to make their boys *declaim* on both sides of an argument. *Swift.*

Your salamander is a perpetual *declaimer* against jealousy. *Addison.*

Who could, I say, hear this generous *declamator*, without being fired at his noble zeal? *Tatler.*

Dress up all the virtues in the beauties of oratory, and *declaim* aloud on the praise of goodness.
Watts.

I every week imposed upon myself a task of composing a theme or a *declamation* in Latin or English. I had great pleasure in lately finding among my papers two of these *declamations*; there is nothing excellent in either of them, yet I cannot help valuing them, &c. *Bishop Watson.*

DECLAMATION may be defined a speech made in public, in the tone and manner of an oration, uniting the expression of action to the propriety of pronunciation, in order to give the sentiment its full impression upon the mind. See ORATORY. The word is now principally used in a derogatory sense.

DECLA'RE, *v a.* & *v.n.*
DECLA'RABLE, *adj.*
DECLARA'TION, *n. s.*
DECLA'RATIVE, *adj.*
DECLA'RATORY, *adj.*
DECLA'RATORILY, *adv.*
DECLA'REDLY, *adv.*
DECLA'REMENT, *n. s.*
DECLA'RER,
DECLA'RING, *part.*

Fr. *declarer*; Span. and Port. *declarar*; Lat. *declaro*, of *de* and *clarus*, clear. To make clear, plain, or well known. As a neuter verb, with *for* or *against*, to publish an opinion or resolution. That is declarable which is capable of proof: declaration and declarement, the instrument or act of making a thing clear or known: declarative is explanatory: declaratorily, in the form of a declaration: declaratory, affirmative, or that which openly expresses a doubtful, obscure sense, or law: declaredly, avowedly. Declaring, as a substantive, is synonymous with declaration.

Declare his glory among the heathen.
1 *Chron.* xvi. 24.

Which things, the most part of our old martyrs rather than they would doe, or once kneel or offer up one crumbe of incence before an image, suffered most crewell and terrible deaths, as the histories of them at large do declare.
Homilies. Sermon against Perill of Idolatry.

And bi three sabotis he *declaride* to hem of scripturis, and openyde and schewide, that it bihofte crist to suffre, and rise aghen fro deeth.
Wiclif. Dedi. 17.

Nought may the woful spirit in myn herte
Declare o' point of all my sorwes smerte
To you my lady, that I love most,
But I bequethe the service of my gost.
Chaucer. Cant. Tales.

They on humble knee
Making obeysaunce, did the cause *declare*
Why they were come her roiall state to see,
To prove the wide report of her great maiestee.
Spenser. Faerie Queene.

His promises are nothing else but *declarations* what God will do for the good of men. *Hooker.*

In Cæsar's army somewhat the soldiers would have had, yet they would not *declare* themselves in it, but only demanded a discharge. *Bacon.*

This is *declarable* from the best writers. *Browne.*

Crystal will calefy into electricity; that is, into a power to attract straws, or light bodies; and convert the needle freely placed, which is a *declarement* of very different parts. *Id.*

Andreas Alciatus the civilian, and Franciscus de Cordua, have both *declaratorily* confirmed the same.
Id. Vulgar Errours.

To *declare* this a little, we must assume that the surfaces of such bodies are exactly smooth. *Boyle.*

The internal faculties of will and understanding decreeing and *declaring* against them. *Taylor.*

These blessings are not only *declaratory* of the good pleasure and intention of God towards them, but likewise of the natural tendency of the thing. *Tillotson.*

There are no where so plain and full *declarations* of mercy and love to the sons of men, as are made in the gospel. *Id.*

The sun by certain signs *declares*,
Both when the south projects a stormy day,
And when the clearing north will puff the cloud away.
Dryden's Virgil.

God is said not to have left himself without witness in the world; there being something fixed in the nature of men, that will be sure to testify and *declare* for him. *South's Sermons.*

Though wit and learning are certain and habitual perfections of the mind, yet the *declaration* of them, which alone brings the repute, is subject to a thousand hazards. *South.*

To this we may add the vox populi, so *declarative* on the same side. *Swift.*

A *declared* gout is the distemper of a gentleman; whereas, the rheumatism is the distemper of a hackney-coachman or chairman, who are obliged to be out at all weathers, and in all hours. *Chesterfield.*

I have had and used the opportunities of conversing with men of the greatest wisdom and fullest experience in those matters, and I do *declare* to you most solemnly and most truly, that on the result of this reading, thinking, experience, and communication, I am not able to come to an immediate resolution in favour of a change of the groundwork of our constitution.
Burke.

My *declared* opposition to the increased and increasing influence of the Crown had made a great impression on His Majesty's mind; for on the day I did homage, he asked the Duke of Rutland if his friend the Bishop of Landaff was not a great enemy to the influence of the Crown. *Bishop Watson.*

DECLINE', *v. a.*, *v. n.* & *n s.*
DECLEN'SION, *n. s.*
DECLIN'ABLE, *adj.*
DECLINA'TION, *n. s.*
DECLIN'ATOR,
DECLIN'ATORY.

Fr. *decliner*; Span. and Port. *declinar*; Ital. *declinaire*; Lat. *declino*, from *deorsum*, downwards, and *clino*, to bind; Gr. κλινω.—Minsheu. To bend downwards; to bring down; to shun; avoid; sink: as a neuter verb, to lean or incline downward; to deviate; to sink; decay. Decline, as well as declension, signifies also the state of decrease, or alteration for the worse; a tendency to a less degree of excellence; descent. Declinable is principally a term of grammar, and expresses that quality of words whereby they can be traced to their roots. Declination, and declinator, are also scientific terms, for which see the articles following:

Neither shalt thou speak in a cause to *decline* after many, to wrest judgment. *Exodus* xxiii. 2.

And now fair Phœbus 'gan *decline* in haste
His weary waggon to the western vale. *Spenser.*

The queen, hearing of the *declination* of a monarchy, took it so ill, as she would never after hear of his suit. *Bacon.*

They'll be by the fire, and presume to know
What's don i' th' capitol; who's like to rise,
Who thrives, and who *declines*. *Shakspeare.*

Sons at perfect age, and fathers *declining*, the father should be as a ward to the son. *Id.*

A beauty-waining and distressed widow,
Even in the afternoon of her best days,
Seduced the pitch and height of all his thoughts,
To base *declension*. *Id. Richard III.*

Since the muses do invoke my power,
I shall no more *decline* that sacred bower,
Where Gloriana, their great mistress, lies. *Waller.*

Hope waits upon the flow'ry prime;
And summer, though it be less gay,
Yet is not looked on as a time
Of *declination* or decay. *Id.*

Sometimes nations will *decline* so low
From virtue, which is reason, that no wrong,
But justice, and some fatal curse annexed,
Deprives them of their outward liberty. *Milton.*

And nature, which all acts of life designs,
Not like ill poets, in the last *declines*. *Denham.*

He had wisely *declined* that argument, though in their common sermons they gave it. *Clarendon.*

If it should be said that minute bodies are indissoluble, because it is their nature to be so, that would not be to render a reason of the thing proposed, but, in effect, to *decline* rendering any. *Boyle.*

That a peccant creature should disapprove and repent of every *declination* and violation of the rules of just and honest, this right reason, discoursing upon the stock of its own principles, could not but infer. *South's Sermons.*

Thus then my loved Euryalus appears;
He looks the prop of my *declining* years! *Dryden.*

Autumnal warmth *declines*;
Ere heat is quite decayed, or cold begun. *Id.*

There is no *declination* of latitude, nor variation of the elevation of the pole, notwithstanding what some have asserted. *Woodward.*

Thy rise of fortune did I only wed,
From its *decline* determined to recede. *Prior.*

We may reasonably allow as much for the *declension* of the land from that place to the sea, as for the immediate height of the mountain. *Burnet's Theory.*

Those fathers lived in the *decline* of literature. *Swift.*

Faith and morality are *declined* among us. *Id.*

God, in his wisdom, hath been pleased to load our *declining* years with many sufferings, with diseases, and decays of nature. *Id.*

Whatever they judged to be most agreeable or disagreeable, they would pursue or *decline*. *Atterbury.*

Supposing there were a *declination* of atoms, yet will it not effect what they intend; for then they do all *decline*, and so there will be no more concourse than if they did perpendicularly descend. *Ray.*

You *decline* musa, and construe Latin, by the help of a tutor, or with some English translation. *Watts.*

There are several ways to know the several planes; but the readiest is by an instrument called a *declinatory*, fitted to the variation of your place. *Moxon.*

Declension is only the variation or change of the termination of a noun, whilst it continues to signify the same thing. *Clarke's Latin Grammar.*

And leaves the semblance of a lover, fixt
In melancholy deep, with head *declined*,
And love-dejected eyes. *Thomson.*

The surest way to conquer, is sometimes to *decline* a battle; to weary out the enemy, by keeping him at bay. *Mason.*

But, though the felon on his back could dare
The dreadful leap, more rational, his steed
Declined the death, and wheeling swiftly round,
Or e'er his hoof had pressed the crumbling verge. *Cowper.*

This praise, O Cheronean sage, is thine!
Why should this praise to thee alone belong?
All else from Nature's moral path *decline*,
Lured by the toys that captivate the throng. *Beattie.*

Statues of glass—all shivered—the long file
Of her dead Doges are *declined* to dust;
But where they dwelt, the vast and sumptuous pile
Bespeaks the pageant of their splendid trust. *Byron.*

DECLINATION, in astronomy, is either north or south, and either true or apparent, according as the real or apparent place of the object is considered. See ASTRONOMY.

DECLIVITY, *n. s.* } Old Fr. *declivité*; from the Lat. *declivis*, *declino*. See DECLINE. Descent; obliquity; downwards; gradual descent, opposed to acclivity.
DECLIVOUS, *adj.* }

Rivers will not flow unless upon *declivity*, and their sources be raised above the earth's ordinary surface, so that they may run upon a descent. *Woodward.*

I found myself within my depth; and the *declivity* was so small, that I walked near a mile before I got to the shore. *Gulliver's Travels.*

And on thy happy shore a temple still,
Of small and delicate proportion, keeps,
Upon a mild *declivity* of hill,
Its memory of thee; beneath it sleeps
Thy current's calmness. *Byron.*

DECOCT, *v. a.* } Fr. *decoction*; Ital. *decoctione*; Span. *decocion*; from Lat. *decoctus*, of *de* and *coquo*, to seethe. To extract the virtues of any thing by boiling, or heat. Shakspeare uses it, barbarously enough, for strengthening by boiling; decoction is the act of boiling to extract the virtue, or the preparation decocted; and the latter seems the meaning also of decocture.
DECOCTION, *n. s.* }
DECOCTIBLE, *adj.* }
DECOCTURE, *n. s.* }

Sena loseth its windiness by *decocting*; and subtile or windy spirits are taken off by incension or evaporation. *Bacon.*

In infusion, the longer it is, the greater is the part of the gross body that goeth into the liquor: but in *decoction*, though more goeth forth, yet it either purgeth at the top, or settleth at the bottom. *Bacon.*

Can sodden water, their barley broth,
Decoct their cold blood to such valiant heat? *Shakspeare.*

They distil their husbands' land
In *decoctions*; and are manned
With ten empirics, in their chamber
Lying for the spirit of amber. *Ben Jonson.*

There she *decocts*, and doth the food prepare;
There she distributes it to every vein;
There she expels what she may fitly spare. *Davies.*

The lineaments of a white lily will remain after the strongest *decoction*. *Arbuthnot.*

DECOLLATE, *v. a.* } Fr. *decoller*. From Lat. *decollatio*, *de* and *collum*, the neck. To behead; a beheading, or decapitation. Applied also metaphorically
DECOLLATION, *n. s.* }

A fine piece (a painting) of a *decollated* head of St. John the Baptist was shewn to a Turkish Emperor; he praised many things, but he observed that

the skin did not shrink from the wounded part of the neck. *Burke on the Sublime.*

He by a *decollation* of all hope, annihilated his mercy; this, by an immoderancy thereof, destroyed his justice. *Brown.*

DE'COMPOSE, *v. a.* } Fr. *decomposer*;
DECOMPOS'ITE, *adj.* } Lat. *decompono*,
DECOMPOS'ITION, *n. s.* } *decompositus*, of
DE'COMPOUND, *v. a.* & *adj.* } *de* and *compono*, *composui*, to COMPOSE, which see. To compound a second time, to dissolve (chemically), seem alike the meaning of both verbs. Decomposite and decompound, as adjectives, mean compounded a second time. Decomposition, the act or practice of so compounding, or a resolution of the parts of things chemically.

Decomposites of three metals, or more, are too long to enquire of, except there be some compositions of them already observed. *Bacon.*

The pretended salts and sulphur are so far from being elementary parts extracted out of the body of mercury, that they are rather, to borrow a term of the grammarians, *decompound* bodies, made up of the whole metal and the menstruum, or other additaments employed to disguise it. *Boyle.*

We consider what happens in the compositions and *decompositions* of saline particles. *Id.*

No body should use any compound or *decompound* of the substantial verbs. *Arbuthnot and Pope.*

When a word stands for a very complex idea, that is compounded and *decompounded*, it is not easy for men to form and retain that idea exactly, *Locke.*

If the violet, blue, and green be intercepted, the remaining yellow, orange, and red will compound upon the paper an orange; and then if the intercepted colours be let pass, they will fall upon this compounded orange, and, together with it, *decompound* a white. *Newton.*

Bees' wax becomes bleached by exposure to the sun and dews in a similar manner as metals become calcined or rusty, viz., by the water on their surface being *decomposed*; and hence the inflammable material which caused the colour becomes united with vital air forming a new acid, and is washed away. *Darwin.*

In preparing the salt from the brine, there is a refuse part, which is formed by the separation and *decomposition* of the grosser particles from the pure salt. *Sir T. Barnard.*

DECOMPOSITION, in chemistry, usually signifies the disunion or separation of the constituent parts of bodies. It differs from mere mechanical division, in that, when a body is chemically decomposed, the parts into which it is resolved are essentially different from the body itself; but though a mechanical force is applied to it ever so long, or if with ever so much violence, the minutest particles into which the body may be reduced, still retain their original nature. Thus, let nitre be reduced to ever so fine a powder, each particle retains the nature of nitre as much as the compounded mass; but, if oil of vitriol is applied, a decomposition takes place, and one of the largest component parts of the nitre rises in the form of a smoking acid spirit, which never could have been suspected to lie hid in the neutral salt. See CHEMISTRY.

DE'CORATE, *a. a.* } Fr. *decorer*; Ital. *de-*
DECOR'AMENT, *n. s.* } *corature*; from Lat. *de-*
DECORA'TION, *n. s.* } *coro*, of *decus*, honor. To
DEC'ORATER } adorn, beautify, dress, embellish. Decorament seems synonymous with decoration.

The ensigns of virtues contribute to the ornament of figures; such as the *decorations* belonging to the liberal arts, and to war. *Dryden.*

After all, to inherit is not to acquire, to *decorate* is not to make. *Johnson.*

DE'COROUS, *adj.* } Lat. *decorus*, *decet*,
DECO'RUM, *n. s.* } it becometh. See DECORATE. Befitting, becoming, proper, suitable to character or station; therefore decorum is becoming gravity and seemliness of behaviour.

If your master
Would have a queen his beggar, you must tell him
That majesty, to keep *decorum*, must
No less beg than a kingdom. *Shakspeare.*

I am far from suspecting simplicity, which is bold to trespass in points of *decorum*. *Wotton.*

Every one is a virtuoso, of a higher or lower degree: every one pursues a Grace, and courts a Venus of one kind or another. The venestums, the honestums, the *decorum* of things, will force its way. *Shaftesbury.*

Beyond the fixed and settled rules
Of vice and virtue in the schools,
The better sort shall set before 'em
A grace, a manner, a *decorum*. *Prior.*

Gentlemen of the army should be, at least, obliged to external *decorum*: a profligate life and character should not be a means of advancement. *Swift.*

It is not so *decorous*, in respect of God, that he should immediately do all the meanest and triflingest things himself, without any inferiour or subordinate minister. *Ray.*

If the prudence of reserve and *decorum* dictates silence in some circumstances, in others prudence of a higher order may justify us in speaking our thoughts. *Burke.*

No band of friends or heirs be there,
To weep, or wish, the coming blow:
No maiden, with disshevelled hair,
To feel, or feign, *decorous* woe. *Beattie.*

DECORTICATE, *v. a.* } Lat. *decortico.*—
DECORTICA'TION, *n. s.* } To divest of the bark or husk; to husk; to peel; to strip.

Take great barley, dried and *decorticated*, after it is well washed, and boil it in water. *Arbuthnot.*

DECOY, *v. a.* & *n. s.* } From Goth. *duck* and
DECOY'-DUCK, *n. s.* } *kui*, or Dut. *koey*, a cage. To entrap ducks into a net, or otherwise; and hence to entrap or ensnare generally. The decoy-duck is the instrument of lure. See below.

A fowler had taken a partridge, who offered to *decoy* her companions into the snare. *L'Estrange.*

These exuberant productions of the earth became a continual *decoy* and snare: they only excited and fomented lusts. *Woodward.*

The Devil could never have had such numbers, had he not used some as *decoys* to ensnare others. *Government of the Tongue.*

An old dramdrinker is the Devil's *decoy*. *Berkeley.*

There is a sort of ducks, called *decoy-ducks*, that will bring whole flights of fowl to their retirements, where are conveniences made for catching them. *Mortimer.*

Decoyed by the fantastic blaze,
Now lost, and now renewed, he sinks absorpt,
Rider and horse. *Thomson.*

A stifled smile of stern vindictive joy
Brightened one moment Edwin's starting tear,
But why should gold man's feeble mind *decoy*
And innocence thus die by doom severe? *Beattie.*

Decoy, among fowlers, a place made for catching wild fowl. A decoy is generally made where there is a large sheet of water surrounded with wood, and beyond that a marshy and uncultivated country. As soon as the evening sets in, the decoy rises, as they term it, and the wild fowl feed during the night. The decoy-ducks are fed with hemp-seed, which is thrown over the skreens in small quantities, to bring them forwards into the pipes or canals, and to allure the wild fowl to follow, as this seed floats. There are several pipes, as they are called, which lead up a narrow ditch that closes at last with a funnel net. Over these pipes, which grow narrower from their first entrance, is a continued arch of netting suspended on hoops. It is necessary to have a pipe or ditch for almost every wind that can blow, as upon this circumstance it depends which pipe the fowl will take to; and the decoy-man always keeps on the leeward side of the ducks, to prevent his effluvia reaching their sagacious nostrils. All along each pipe, at certain intervals, are placed skreens made of reeds, so situated, that it is impossible the wild-fowl should see the decoy-man, before they have passed on towards the end of the pipe, where the purse-net is placed. The inducement of the wild-fowl to go up one of these pipes is, because the decoy-ducks trained to this lead the way, either after hearing the whistle of the decoy-man, or enticed by the hemp-seed: the latter will dive under water, whilst the wild-fowl fly on, and are taken in the purse net. It often happens, however, that the wild-fowl are in such a state of sleepiness and dozing, that they will not follow the decoy-duck. Use is then generally made of a dog, who is taught his lesson; he passes backwards and forwards between the reed-skreens, in which are little holes, both for the decoy-man to see, and the dog to pass through; this attracts the eye of the wild-fowl, who, not choosing to be interrupted, advance towards the small and contemptible animal, that they may drive him away. The dog all the time, by the direction of the decoy-man, plays among the screens of reeds, nearer and nearer the purse-net; till at last the man appears behind a screen, and the wild-fowl not daring to pass by him in return, nor being able to escape upwards, on account of the net covering, rush on into the net. Sometimes the dog will not attract their attention, if a red handkerchief, or something very singular, is not put about him. The general season for catching fowls in decoy, is from the end of October till February. Decoys are commonly let at a certain annual rent, and yield large quantities of ducks, wigeons, and teal; but they have been diminished in number by the recent drainage of many of the fenny parts of England.

DECREASE, *v. a.* & *n.* & *n. s.* } Lat. *decresco*,
De'crement, *n. s.* } from *de*, and
Decrescent, *adj.* } *cresco*, to increase. To make less; diminish: as a neuter verb, to grow less; be diminished. The state or act of growing less: decrement is the quantity lost in decrease; and decrescent, growing less.

From the moon is the sign of feasts, a light that *decreaseth* in her perfection. *Eccles.* xliii. 7.

He did dishonourable find
Those articles, which did our state *decrease*.
Daniel.

See in what time the seeds, set in the increase of the moon, come to a certain height, and how they differ from those that are set in the *decrease* of the moon. *Bacon.*

Unto fifty years, as they said, the heart annually increaseth the weight of one drachm; after which, in the same proportion, it *decreaseth*. *Browne's Vulgar Errours.*

Upon the tropick, and first descension from our solstice, we are scarce sensible of declination; but declining farther, our *decrement* accelerates: we set apace, and in our last days precipitate into our graves. *Id.*

Rocks, mountains, and the other elevations of the earth, suffer a continual *decrement*, and grow lower and lower. *Woodward.*

By weakening toil and hoary age o'ercome,
See thy *decrease*, and hasten to thy tomb. *Prior.*

Heat increases the fluidity of tenacious liquids, as of oil, balsam, and honey; and thereby *decreases* their resistance. *Newton.*

When the sun comes to his tropicks, days increase and *decrease* but a very little for a great while together. *Id.*

They who are now, like the Baptist, burning and shining lights, must like him gradually *decrease*, while others are increasing about them. *Doddridge's Expositor.*

DECREE', *v. a.*, *v. n.* & *n. s.* } Fr. *decret*,
Decre'tal, } and *decreter*;
Decre'tist, } Span. Ital. and
Decre'tory, } Port. *decreto*;
from Lat. *decretum*; qu. Gr. κρινω, to judge. To doom or decide formally or publicly; to make an edict; to establish by law; resolve. A decree is the edict, law, rule, or decision. Decretal, a book of decrees or laws, and particularly of the popes: decretist, he who professedly studies or is skilled in the decretals: decretory, judicial, decisive, final.

When he made a *decree* for the rain, and a way for the lightning of the thunder. *Job* xxviii. 26.

There went a *decree* from Cæsar Augustus, that al the world should be taxed. *Luke* ii. 1.

They shall see the end of the wise, and shall not understand what God in his counsel hath *decreed* of him. *Wisdom* iv.

The second room, whose walls
Were painted fair with memorable gests
Of magistrates, of courts, of tribunals,
Of laws, of judgments, and of *decretals*. *Spenser.*

If you deny me, fie upon your law!
There is no force in the *decrees* of Venice.
Shakspeare.

Traditions and *decretals* were made of equal force, and as authentical as the sacred charter itself. *Howel's Vocal Forest.*

Father eternal; thine is to *decree*;
Mine, both in heaven and earth, to do thy will.
Milton.

The motions of the moon, supposed to be measured by sevens, and the critical or *decretory* days depend on that number. *Browne's Vulgar Errours.*

The folly of man, and not the *decree* of heaven, is the cause of human calamity. *Broome.*

There are lenitives that friendship will apply, before it will be brought to the *decretory* rigours of a condemning sentence. *South's Sermons.*

Had heaven *decreed* that I should life enjoy,
Heaven had *decreed* to save unhappy Troy.
Dryden.

Are we condemn'd by fate's unjust *decree*,
No more our houses and our homes to see? *Id.*

The king their father,
On just and weighty reasons, has *decreed*
His sceptre to the younger. *Rowe.*

A *decretal* epistle is that which the pope decrees either by himself, or else by the advice of his cardinals; and this must be on his being consulted by some particular person or persons thereon.
Ayliffe's Parergon.

The *decretists* had their rise and beginning under the reign of the emperor Frederick Barbarossa. *Id.*

Whether it be *decreed* by the authority of reason, or the tyranny of ignorance, that, of all the candidates for literary praise, the unhappy lexicographer holds the lowest place, neither vanity nor interest incited me to inquire. *Johnson. Plan of Dictionary.*

Here are the ancient editions of the Papal *decretals*, and the commentators on the civil law, the edicts of Spain, and the statutes of Venice.
Id. On the Harleian Library.

DECREP'ID, or DECREP'IT, *adj.* DECREP'ITATE, *v. a.* DECREPITA'TION, *n. s.* DECREP'ITNESS, DECREP'ITUDE. Fr. *decrepite;* Ital. and Span. *decrepito;* Lat. *decrepitus*, crackling; from the crackling of a candle or lamp when nearly out, says Minsheu, after Scaliger. Wasted; old; weak; in extreme decay. To decrepitate is used by Browne for the calcining of salt until it ceases to crackle. Decrepitness and decrepitude are man's 'last stage of all.'

Of men's lives, in this *decrepit* age of the world, many exceed fourscore, and some an hundred years.
Raleigh.

This pope is *decrepit*, and the bell goeth for him: take order that there be chosen a pope of fresh years.
Bacon.

Decrepit miser! base, ignoble wretch. *Shakspeare.*

If favours out-live one age, they prove *decrepit* and heartless. *Bishop Hall. Contemplations.*

And from the north to call
Decrepit Winter. *Milton.*

So will it come to pass in a pot of salt, although *decrepitated.* *Browne's Vulgar Errours.*

If true succession from our isle should fail,
And crowds profane with impious hands prevail,
Not thou, nor those thy factious arts engage
Shall reap that harvest of rebellious rage,
With which thou flatterest thy *decrepit* age. *Dryden.*

Propped on his staff, and stooping as he goes,
A painted mitre shades his furrowed brows;
The god, in this *decrepit* form arrayed,
The gardens entered, and the fruits surveyed. *Pope.*

Mother earth, in this her barrenness and *decrepitness* of age, can procreate such swarms of curious engines. *Bentley.*

The charge of witchcraft inspires people with a malevolence towards those poor *decrepit* parts of our species, in whom human nature is defaced by infirmity and dotage. *Addison.*

Time in advance behind him hides his wings,
And seems to creep *decrepid* with his age. *Young.*

The emaciated and *decrepid* appearance, with the ridiculous and idiotic gestures, of the opium-eaters in Constantinople, is well described in the Memoirs of Baron de Tott. *Darwin.*

DECREPITATION, in chemistry, the crackling noise which several salts make when suddenly heated, accompanied by a violent exfoliation of their particles. This phenomenon has been ascribed to the 'sudden conversion of the water which they contain into steam.' But absolutely dry sulphate of barytes decrepitates furiously without any possible formation of steam, or any loss of weight. The same holds with respect to common salt, calcareous spars, and sulphate of potash, which contain no water. In fact, it is the salts which are anhydrous, or destitute of water, which decrepitate most powerfully; those that contain water generally enter into tranquil liquefaction on being heated. Salts decrepitate, for the same reason that glass, quartz, and cast-iron crack, with an explosive force, when very suddenly heated; namely, from the unequal expansion of the laminæ which compose them, in consequence of their being imperfect conductors of heat.

DECRESCENT, in heraldry, a term signifying a representation of the moon when declining from the full to the last quarter, her horns being turned to the sinister side of the shield.

The DECRETALS compose the second part of the canon law. The first, acknowledged by all the learned as genuine, is a letter of Pope Siricius, written A. D. 385, to Himerus, bishop of Tarragona, in Spain, concerning some disorders which had crept into the churches of Spain. Gratian published a collection of decretals, containing all the ordinances made by the popes till A. D. 1150. Gregory IX. in 1227, following the example of Theodosius and Justinian, formed a constitution of his own, collecting into one body all the decisions and all the causes which served to advance the papal power; which collection of decretals was called the pentateuch, because it contained five books.

DECRY', *v. a.* Fr. *decrier*, *de* and cry. See CRY. To censure; to blame clamorously, or vehemently.

Malice in criticks reigns so high,
That for small errours they whole plays *decry*.
Dryden.

Quacks and imposters are still cautioning us to beware of counterfeits, and *decry* others' cheats only to make more way for their own. *Swift.*

Those measures, which are extolled by one half of the kingdom, are naturally *decried* by the other
Addison.

Then prompt no more the follies you *decry*,
As tyrants doom their tools of guilt to die. *Johnson.*

DECUMANA, in ancient history and geography, the name of a nation of the Marse or Marcomanni. See DECUMATES AGRI.

DECUMARIA, in botany: a genus of the monogynia order, and dodecandria class of plants: CAL. decaphyllous, superior; petals ten; CAPS. eight or nine cells and polyspermous. Species two, both natives of Carolina.

DECUMATES AGRI, fields granted on a tithe, as appears from Tacitus, to the Gauls who succeeded the Marcomanni, that had till then proved a check to the Roman conquests, on the Rhine; and hence, probably, their name, people living on the marches or limits of the empire.

DECU'MBENCE, *n. s.* } Lat. *decumbo.*
DECU'MBENCY, } The act of lying
DECU'MBITURE, } down; the posture of lying down.

This must come to pass, if we hold opinion they lie not down, and enjoy no *decumbence* at all; for station is properly no rest, but one kind of motion.
Browne's Vulgar Errours.

Not considering the ancient manner of *decumbency*, he imputed this gesture of the beloved disciple unto rusticity, or an act of incivility. *Id.*

If but a mile she travel out of town,
The planetary hour must first be known,
And lucky moment: if her eye but akes,
Or itches, its *decumbiture* she takes. *Dryden.*

DE'CUPLE, *adj.* Lat. *decuplus*, tenfold. The same number ten times repeated.

Man's length, that is, a perpendicular from the vertex unto the sole of the foot, is decuple unto his profundity; that is, a direct line between the breast and the spine. *Browne's Vulgar Errours.*

Supposing there be a thousand sorts of insects in this island, if the same proportion holds between the insects of England and of the world, as between plants domestick and exotick, that is, near a *decuple*, the species of insects will amount to ten thousand. *Ray.*

DECURIA, or DECURY, among the ancient Romans, ten men under one leader, called the decurio. The decuria was the third part of a turma, or the thirtieth of a legion of horse, which consisted of 300 men. The Roman cavalry was divided into decuriæ, which were subdivisions of a century, each century containing ten decuries.

DECU'RIO, a subaltern officer in the Roman armies, who commanded a decuria.

DECU'RION, *n. s.* Lat. *decurio*. A commander over ten; an officer subordinate to the centurion.

He instituted *decurions* through both these colonies, that is, one over every ten families. *Temple.*

DECURIONES MUNICIPALES, magistrates in the Roman provinces, who formed a body to represent the Roman senates in free and corporate towns. They consisted of ten, whence the name; and their duty was to watch over the interests of their fellow citizens, and to increase the revenues of the commonwealth. Their court was called curio decurionum and minor senatus; and their decrees, called decreta decurionum, were marked D. D. at the top. They generally styled themselves civitatum patres curiales, and honorati municipiorum senatores. They were elected with the same ceremonies as the Roman senators; they were to be at least twenty-five years of age, and to be possessed of ten talents.

DECU'RSION, *n. s.* Lat. *decurcus*, from *de* and *cursus*. The act of running down.

What is decayed by that *decursion* of waters, is supplied by the terrene fæces which water brings. *Hale.*

DECU'SSATE, *v. a.* } Lat. *decusso*. To in-
DECUSSA'TION, *n. s.* } tersect at acute angles. The act of crossing, or state of being crossed at unequal angles.

The crucigerous ensign carried this figure not transversely or rectangularly intersected, but in a *decussation*, after the form of an Andrian or Burgundian cross, which answereth this description. *Browne.*

This it performs by the action of a notable muscle on each side, having the form of the letter X, made up of many fibres, *decussating* one another longways. *Ray.*

Though there be *decussation* of the rays in the pupil of the eye, and so the image of the object in the retina, or bottom of the eye, be inverted; yet doth not the object appear inverted, but in its right or natural posture. *Id.*

DECUSSORIUM, an instrument used by surgeons, which, by pressing gently on the dura mater, causes an evacuation of the pus collected between it and the cranium, through the perforation made by the trepan.

DEDDINGTON, a market-town of Oxfordshire, formerly a corporation and borough. The Birmingham and Oxford canal passes near this place, and is of considerable advantage to it. In the neighbourhood are two medicinal springs, one of which is highly impregnated with vitriolic salt. It has a weekly market on Saturday. It is seated on an eminence, seventeen miles north of Oxford, and sixty-nine N.N.W. of London.

DEDE'CORATE, *v. a.* } Lat. *dedecoro*. To
DEDECORA'TION, *n. s.* } disgrace; to bring a
DEDECO'ROUS, *adj.* } reproach upon. The act of disgracing; disgrace. Disgraceful.

DEDENTITION, *n. s.* Lat. *de* and *dentitio*. Shedding of teeth. The loss or shedding of the teeth.

Solon divided life into ten septenaries, because in every one thereof a man received some sensible mutation; in the first is *dedentition*, or falling of teeth.
Browne's Vulgar Errours.

DEDHAM, a town and parish of England, in the county of Essex, situated on the river Stour, over which is a bridge. It is six miles N.N.E. of Colchester, and its church is noted for a fine Gothic steeple. Population about 2200.

DEDHAM, a township of Massachusetts, incorporated in 1637.

DEDHAM, a town in the above township, the capital of Norfolk county, called by the Indians Tiot. It lies on the south side of Charles River, eleven miles south-west of Boston, and 320 from Philadelphia.

DEDICATE, *v. a.* & *adj.* } French, *dedier*;
DEDICATION, *n. s.* } Port. and Ital. *de-*
DEDICATOR. } *dicare*; Teut. *de-*
DEDICATORY, *adj.* } *diciren*; Lat. *de-*
dicare, from *Deo*, *dicare*, to consecrate to God. To devote to some deity, or to some pious or religious service; to resign, appropriate, or inscribe, to a particular person or service. Dedication

is also the act, form, or inscription, used in dedicating. A dedicator, says Johnson, with more temper than accuracy, is one who inscribes his work to a patron, with compliment and servility.

The princes offered for *dedicating* the altar, in the day that it was anointed. *Numb.* vii. 10.

A pleasant grove,
Was shot up high, full of the stately tree,
That *dedicated* is to Olympick Jove,
And to his son Alcides. *Spenser.*

Ladies, a general welcome from his grace
Salutes you all: this night he *dedicates*
To fair content and you. *Shakspeare.*

Prayers from preserved souls,
From fasting maids, whose names are *dedicate*
To nothing temporal. *Id.*

It cannot be laid to many men's charge, that they have been so curious as to trouble bishops with placing the first stone in the churches; or so scrupulous as, after the erection of them, to make any great ado for their *dedication*. *Hooker.*

This tenth part, or tithe, being thus assigned unto him, becometh as a thing *dedicate* and appropriate unto God. *Spelman.*

He compiled ten elegant books, and *dedicated* them to the lord Burghley. *Peacham.*

He went to learn the profession of a soldier, to which he had *dedicated* himself. *Clarendon.*

Bid her instant wed,
And quiet *dedicate* her remnant life,
To the just duties of an humble wife. *Prior.*

He that would make a real progress in knowledge must *dedicate* his age as well as youth, the latter growth, as well as the first fruits, at the altar of truth. *Berkeley.*

Thus I should begin my epistle if it were a *dedicatory* one; but it is a friendly letter. *Pope.*

Proud as Apollo on his forked hill,
Sat full-blown Bufo, puffed by every quill;
Fed by soft *dedication* all day long,
Horace and he went hand in hand in song. *Id.*

Leave dangerous truths to unsuccessful satires;
And flattery to fulsome *dedicators*. *Id.*

Among publick solemnities there is none so glorious as that under the reign of king Solomon, at the *dedication* of the temple. *Addison.*

For growing names the weekly scribbler lies,
To growing wealth the *dedicator* flies.
Johnson. Vanity of Human Wishes.

DEDICATION, the act of consecrating a temple, altar, statue, palace, &c. to the honor of some deity. The use of dedications is very ancient both among the worshippers of the true God and among the heathens: the Hebrews call it חנכה hhanuchah, 'initiation;' which the Greek translators render Εγκαινια, and Εγκαινισμος, 'renewing.' In the Scripture we meet with dedications of the tabernacle, of altars, of the first and second temple, and even of the houses of private persons. One of the most solemn on record is that of the first temple by Solomon, 1 Kings viii., 2 Chron. vi. There were also dedications of vessels, and of the garments of the priests and Levites, as well as of persons themselves. The heathens had also dedications of temples, altars, and images of their gods, &c. Nebuchadnezzar held a solemn dedication of his statue, Dan. iii. 2. Tacitus, Hist. lib. iv. ch. 53, mentions the dedication of the capitol, upon rebuilding it by Vespasian, &c. In modern times dedication is only applied to a church; and is properly the consecration of it performed by a bishop, with a number of ceremonies prescribed by the church. See CONSECRATION.

DEDITION, *n. s.* Lat. *deditio*. The act of yielding up any thing; surrendry.

It was not a complete conquest, but rather a *detition* upon terms and capitulations agreed between the conqueror and the conquered. *Hale.*

DEDU'CE, *v. a.* DEDU'CIBLE. *adj.* DEDU'CIVE, DEDU'CEMENT, *n. s.* DEDU'CT, *v. a.* DEDU'CTION, *n. s* DEDU'CTIVE, *adj.* DEDU'CTIVELY, *adv.* Fr. *deduire*; Span. *deduzer*; Ital. *didurre*; Lat. *deduco, deducere*, of *de* and *duco*. To lead or draw. To draw or derive a conclusion in argument; to trace a series of events, or concatenatious circumstances; to subtract or take off; hence to separate, divide. Deducible, and deductive, mean consequential, evident to reason. Deducive, performing, or drawing a conclusion. Deductively, consequentially. Deduction, the result of a series of argumentation; a consequence, as well as a sum or thing subtracted.

Having yet, in his *deducted* spright,
Some sparks remaining of that heavenly fire.
Spenser.

Out of scripture such duties may be deduced, by some kind of consequence; as by long circuit of *deduction* it may be that even all truth, out of any truth may be concluded. *Hooker.*

I will *deduce* him from his cradle, through the deep and lubric waves of state and court, till he was swallowed in the gulph of fatality. *Wotton Buck.*

The condition, although *deducible* from many grounds, yet shall we evidence it but from few. *Browne's Vulgar Errours.*

There is scarce a popular errour passant in our days, which is not either directly expressed, or *deductively* contained in this work. *Id.*

You have laid the experiments together in such a way, and made such *deductions* from them, as I have not hitherto met with. *Boyle.*

All cross and distasteful humours are either expressly, or by clear consequence and *deduction*, forbidden in the New Testament. *Tillotson.*

So far, therefore, as conscience reports any thing agreeable to or *deducible* from these, it is to be hearkened to. *South.*

Praise and prayer are his due worship, and the rest of those *deducements* which I am confident are the remote effects of revelation. *Dryden.*

The general character of the new earth is paradisaical; and the particular character, that it hath no sea: and both are apparently *deducible* from its formation. *Burnet.*

Reason is nothing but the faculty of *deducing* unknown truths from principles already known. *Locke.*

All properties of a triangle depend on, and are *deducible* from, the complex idea of three lines, including a space. *Id.*

We *deduct* from the computation of our years that part of our time which is spent in incogitancy of infancy. *Norris.*

All knowledge of causes is *deductive*; for we know none by simple intuition, but through the meditation of their effects. *Glanville.*

That by diversity of motions we should spell out things not resembled by them, we must attribute to some

secret *deduction*; but what this *deduction* should be, or by what mediums this knowledge is advanced, is as dark as ignorance. *Id.*

O goddess, say, shall I *deduce* my rhimes
From the dire nation in its early times? *Pope.*

Bring then these blessings to a strict account;
Make fair *deductions*; see to what they mount. *Id.*

A reflection so obvious, that natural instinct seems to have suggested it even to those who never much attended to the *deductions* of reason. *Rogers.*

Lend me your song, ye nightingales! oh pour
The mazy-running soul of melody
Into my varied verse! while I *deduce*,
From the first note the hollow cuckoo sings,
The symphony of spring. *Thomson.*

Set before you the moral law of God, with such *deductions* from it as our Saviour hath drawn, or our own reason, well informed, can make. *Duppa.*

DEE, a river of England and Wales, which rises at the foot of the lofty mountain Arun, in the north-west angle of Merionethshire, from which it runs through a fine valley in a north-east direction to Denbighshire; visits the north-west border of Cheshire, to which it serves as a boundary; then crossing over to Chester, it flows thence to the sea, forming a broad sandy estuary, which separates Cheshire from Flintshire. This river is navigable from Elsemere, in Shropshire, to Chester; but at this city the navigation is interrupted by a ledge of rocks running across the bed of it, and causing a cascade. The Dee falls into the Irish Sea, fifteen miles below Chester.

DEE, a river of Scotland, in Aberdeenshire, which rises from the hill Breirach, and after running through the parishes of Braemar, Crathy, and many others, with vast rapidity, falls into the German Ocean at Aberdeen, 140 miles from its source. It produces, in great plenty, trout, pikes, eels, &c., and affords one of the greatest salmon-fisheries in Scotland. In passing through Braemar, the Dee has a fine cascade, with the additional singularity, that for sixty yards it is confined between two rocks, within so narrow a space, that some persons have ventured to step over it.

DEE (John), a famous mathematician and astrologer, born in London, July 1527. In 1542 he was sent to St. John's College, Cambridge. After five years close application to the mathematics and astronomy, he went to Holland; and, on his return to Cambridge, was elected a fellow of Trinity College, then first erected by king Henry VIII. In 1548 he took the degree of M.A. and left England a second time on account of the suspicion attached to his character as an astrologer. Upon leaving England, he went to the University of Louvain, where he took the degree of LL.D. In 1551 he returned to England, and obtained the rectory of Upton-upon-Severn; but soon after the accession of queen Mary, he was accused of practising against her life by enchantment. He suffered a tedious confinement on this account, and was several times examined; till, in 1555, he obtained his liberty by an order of council. In 1564 he made another voyage to the continent, to present a book he had dedicated to the emperor Maximilian. He returned to England; but, in 1571, we find him at Lorrain; where, being dangerously ill, the queen sent over two physicians to his relief. Having once more returned to his native country, he settled at Mortlake in Surry, where he continued his studies with unremitted ardor, and collected a considerable library of curious books and MSS. with a variety of instruments, most of which were afterwards destroyed by the mob. In 1579 queen Elizabeth, being desirous of information concerning the recent discoveries of her subjects in America, commanded Mr. Dee to furnish her with proper geographical descriptions. Accordingly he presented her, in three weeks after, with two large rolls, on which the new countries were geographically described and historically illustrated: these rolls are preserved in the Cottonian library. In 1581 Dee became acquainted with one Edward Kelly, by whose assistance he performed various incantations, and affected, it is said, to maintain a frequent intercourse with the spiritual world. In 1583 they were both introduced to a Polish nobleman, then in England, named Albert Laski, palatine of Siradia, who persuaded them to accompany him to his native country; and they visited, successively, Poland, the court of the emperor Rodolph II., and Bohemia. In 1595 they returned to England, and Dee was once more graciously received by the queen; who made him Warden of Manchester College. In 1604 he returned to his house at Mortlake, where he died in 1608. Queen Elizabeth seems to have made use of Dee, occasionally, as a political agent: he was evidently a mathematician of considerable genius; but his pretensions to astrological and alchemical knowledge disgrace his memory. Dr. M. Casaubon published, in 1659, 'A true and faithful Relation of what passed between Dr. John Dee and some Spirits.'

DEED, *n. s.* } Sax. ðæð; Belg. *daed;*
DEED'LESS. } Goth. *dad;* Lat. from *do, dedi,* says Minsheu; and this from Gr. δεδοναι; to give (effect). An action: any thing done or fully performed; a completed legal instrument or act; fact; reality. Deedless is, inactive; wordy, without performance of pledges or professions.

And manye men bileeuyden, and camen knowlechinge and tellynge her *dedis*. *Wiclif. Dedis*, xix.

The same had not consented to the counsel and *deed*. *Luke.*

They desire, with strange absurdity, that to the same senate it should belong to give full judgment in matter of excommunication, and to absolve whom it pleased them, clean contrary to their own former *deeds* and oaths. *Hooker.*

The solicitor gave an evidence for a *deed*, which was impeached to be fraudulent. *Bacon.*

From lowest place when virtuous things proceed,
The place is dignified by the doer's *deed*.
Shakspeare.

Speaking in deeds, and *deedless* in his tongue.
Id.

Nor knew I not
To be with will and *deed* created free.
Milton.

I, on the other side,
Used no ambition to commend my *deeds*;
The *deeds* themselves, tho' mute, spoke loud the doer
Id.

The monster nought replied; for words were vain,
And *deeds* could only *deeds* unjust maintain.
Dryden.

We are not secluded from the expectation of reward for our charitable *deeds*. *Smalridge's Sermons.*

Instant, he cried, your female discord end,
Ye *deedless* boasters! and the song attend. *Pope.*

'T was where in early youth he wont retire
To woo sweet Solitude, and taste her charms
Ere that his bosom caught the martial fire;
Ere that his name was great in *deeds* of arms.
Gay.

Roll on, thou deep and dark blue Ocean—roll!
Ten thousand fleets sweep over thee in vain;
Man marks the earth with ruin—his control
Stops with the shore;—upon the watery plain
The wrecks are all thy *deed*. *Byron.*

DEEG, a celebrated town and fortress of Hindostan, in the province of Agra. It was taken from the Jauts in the year 1776, by the nabob Nujuff Khan, after a siege of twelve months, but soon afterwards restored. Here in 1805 lord Lake defeated the Mahratta army, commanded by Holkar, and, took this supposed impregnable town by storm. At the peace it was restored to the raja Runjeet Sing.

DEEM, *v. a.*, *v. n.* & *n. s.* Sax. ᵹeman; Goth. and Swed. *doma*; Teut. *doeman*; Gr. of θεμις, justice. To judge; to determine; to conclude on consideration: also, as a neuter verb, to judge, determine, or imagine. Shakspeare uses the substantive for judgment or opinion.

Nyle ye *deem* that ghe be not *demed*. For, in what doom ye *demen*, ye schulen be *demed*; and, in what mesure ye meten, it schal be meten agen to you.
Wiclif. Matt. 7.

But they that skill not of so heavenly matter,
All that they know not, envy, or admire,
Rather than envy, let them wonder at her,
But not to *deem* of her desert aspire. *Spenser.*

Here eke that famous golden apple grew,
For which the Idean ladies disagreed,
Till partial Paris *dempt* it Venus' due. *Id.*

So natural is the union of religion with justice, that we may boldly *deem* there is neither, where both are not. *Hooker.*

Hear me, my love, be thou but true of heart,
—I true! how now? what wicked *deem* is this?
Shakspeare.

He who to be *deemed*
A god, leaped fondly into Ætna's flames. *Milton.*

These blessings, friend, a deity bestowed;
For never can I *deem* him less than god. *Dryden.*

Nature, disturbed,
Is *deemed* vindictive to have changed her course.
Thomson.

They are gone,
And others come: so flows the wave on wave
Of what these creatures call eternity,
Deeming themselves the breakers of the ocean,
While they are but its bubbles, ignorant
That foam is their foundation. *Byron.*

How happier she, who in Love's tranquil bower,
Clasps the sweet prize of conquest, not the power;
Who while one gaze her charms to all prefers,
And one warm heart returns the warmth of hers,
Heeds not tho' crowds to half her beauty chill,
Should *deem* some flirt of fashion fairer still.
Dr. T. Brown.

DEEMSTERS, or DEMSTERS. All controversies in the Isle of Man are decided without process, writings, or any charges, by certain judges chosen yearly from among themselves, called deemsters, there being two for each division of the island: they sit judges in all courts, either for life or property; and, with the advice of twenty-four keys, declare what is law in uncommon emergencies.

DEEP, *adj.* & *n. s.*
DEEP'EN, *v. a.* & *n.*
DEEP'ENING, *n. s.*
DEEP'LY, *adv.*
DEEP'-MOUTHED,
DEEP'-MUSING,
DEEP'NESS, *n. s.*

Sax. ᵹeeþ; Goth. and Swed. *diup*; Belg. *diep*; old Goth. *dy*, to which Serenius traces this word. Mr. Tooke says, 'it is merely the past participle of ᵹiþþan, to dip, or dive.' Profound; having length downwards; depressed; sunk; and, because that which is deep in the earth is dark, remote, and undisturbed, gloomy; dark-colored; a dark or strong shade of any color; voluminous in sound; quiet; still. Also, in a metaphorical sense, gloomy; remote in meaning; sagacious; far-penetrating. Deep, as a substantive, expresses the still and quiet part of night; an abyss; and, more particularly, the sea. To deepen is, as an active verb, to make deep; to sink low or lower; to darken; becloud; make gloomy: as a neuter verb, to descend slowly, or by degrees. The adverb, and other substantives, follow these meanings.

And I saigh an aungel comynge doun fro heuene, hauynge the keye of *depnesse* and a great chayne in his hond. *Wiclif. Apoc.* 20.

And the Lord God caused a *deep* sleep to fall upon Adam. *Genesis* ii. 21.

Deep calleth unto *deep* at the noise of thy water-spouts: all thy waves and thy billows are gone over me. *Psalm* xlii. 7.

Some fell upon stony places, and they withered, because they had no *deepnes* of earth. *Mat.* xiii. 5.

Hee was close and secrete, a *deep* dissimuler, lowlye of counteynaunce, arrogant of heart, outwardly coumpinable where he inwardely hated, not letting to kisse whom he thoughte to kyll. *Sir T. Moore.*

Yet we did lift up our hearts and voices to God above, who sheweth his wonders in the *deep*. *Bacon.*

To keep his promise with him, he had *deeply* offended both his nobles and people.
Id. Henry VII.

He's meditating with two *deep* divines.
Shakspeare.

There want not many that do fear,
In *deep* of night, to walk by this Herne's oak. *Id.*

This avarice
Strikes *deeper*, grows with more pernicious root.
Id.

Behold the English beach
Pales in the flood with men, with wives and boys,
Whose shouts and claps outvoice that *deep-mouthed* sea.
Id.

When I have most need to employ a friend,
Deep, hollow, treacherous, and full of guile,
Be he to me. *Id. Richard III.*

Klockings so *deeply* hath sworn ne'er more to come
In bawdy-house, that he dares not go home. *Donne.*

If we go down to the great *deep*, the womb of moisture, the well of fountains, the great pond of the world, we know not whether to wonder at the element itself, or the guests which it contains.
Bishop Hall's Contemplations.

He in my ear
Vented much policy and projects *deep*
Of enemies, of aids, battles, and leagues,
Plausible to the world, to me worth nought.
Milton.

And in the lowest *deep*, a lower *deep*,
Still threatening to devour me opens wide,
To which the hell I suffer seems a heaven.
Milton's Paradise Lost.

For, even in that season of the year, the ways in that vale were very deep. *Clarendon.*

Fear is a passion that is most *deeply* rooted in our natures, and flows immediately from the principle of self-preservation. *Tillotson.*

You must *deepen* your colours so, that the orpiment may be the highest. *Peacham.*

What earth in her dark bowels could not keep
From greedy man, lies safer in the *deep*. *Waller.*

Having taken of the *deeply* red juice of buckthorn berries, I let it drop upon white paper. *Boyle.*

The gaping gulph low to the centre lies,
And twice as *deep* as earth is distant from the skies.
Dryden.

Thou hast not strength such labours to sustain:
Drink hellebore, my boy! drink *deep*, and scour thy brain. *Id.*

With *deeper* brown the grove was overspread. *Id.*

Then toils for beasts, and lime for birds were found,
And *deep-mouthed* dogs did forest walks surround.
Id.

If the matter be knotty, and the sense lies *deep*, the mind must stop and buckle to it, and stick upon it with labour and thought, and close contemplation. *Locke.*

Her gloomy presence saddens all the scene,
Shades every flower, and darkens every green,
Deepens the murmurs of the falling floods,
And breathes a browner horror on the woods. *Pope.*

But he *deep-musing* o'er the mountains strayed,
Through many thickets of the woodland shade. *Id.*

The city of Rome would receive a great advantage from the undertaking, as it would raise the banks and *deepen* the bed of the Tiber. *Addison.*

Virgin face divine
Attracts the hapless youth through storms and waves,
Alone in *deep* of night. *Philips.*

Hills, dales, and forests far behind remain,
While the warm scent draws on the *deep-mouthed* train.
Gay.

While at the bow the watch Arion keeps,
To shun what cruisers wander o'er the deeps.
Falconer.

We have to supply means of occupation and subsistence for those, to whom not only England, but Europe is so *deeply* indebted. *Sir T. Bernard.*

Cosmetic succour won a vermeil hue,
All soft she spreads, and lo! the rouge is blue!
In vain she wipes and washes, frets and scrubs,
The horrid azure *deepens* as she rubs. *Dr. T. Brown.*

Such writings, though they may be lightly passed over by many readers, yet if they make a deep impression on one active mind in a hundred, the effects may be considerable. *Franklin.*

Her hollow womb,
Conceiving thunders, through a thousand *deeps*
And fiery caverns, roars beneath his foot.
The hills move lightly, and the mountains smoke,
For he has touched them. *Cowper.*

Me they revile, with many ills molested,
They bid me seek from thee, my Lord, redress;
On God, they say, his hope and trust he rested,
Let God relieve him in his *deep* distress.
Kirke White.

The sweetness of the violet's *deep* blue eyes,
Kissed by the breath of heaven, seems coloured by its skies. *Byron.*

The Convent bells are ringing,
But mournfully and slow;
In the gray square turret swinging,
With a *deep* sound, to and fro. *Id.*

Vain
The struggle; vain, against the coiling strain
And gripe, and *deepening* of the dragon's grasp,
The old man's clench; the long envenomed chain
Rivets the living links,—the enormous asp
Enforces pang on pang, and stifles gasp on gasp. *Id.*

DEER, *n. s.* Sax. ᵹeoꝛ; Goth. *dyr*; Belg. *dier*; Teut. *thier*; from Gr. θηρ; Æolic φηρ, and thence probably from Heb. דר, wild deer. Originally signifying any wild animal, though now confined to the cervine species.

You have beaten my men, killed my *deer*, and broke open my lodge. *Shakspeare.*

The pale that held my lovely *deer*. *Waller.*

I was a stricken *deer* that left the herd
Long since, with many an arrow deep infixed:
My panting side was charged, when I withdrew
To seek a tranquil death in distant shades.
Cowper. Task.

DEER, in zoology. See CERVUS. Of this useful animal there are three principal species in this country, viz. the stag, C. elaphus; the roe, C. capreolus; and C. dama the fallow deer. By castrating the males when newly dropped, says Mr. Loudon, which is not in the least dangerous, it affords the means of having good venison until Christmas, without any other sort of food than the common grass; they also fatten more quickly; the operation must, however, be performed while they are quite young. By stat. 16 Geo. III. cap. 30., if any person shall hunt or take in a snare, or kill or wound any red or fallow deer in any forest, chase, &c., whether enclosed or not; or in any closed park, paddock, &c., without the consent of the owner, or be aiding in such offence, they shall forfeit £20 for the first offence; and also £30 for each deer wounded, killed, or taken. A game-keeper offending, to forfeit double. For a second offence offenders shall be transported for seven years. By stat. 28 Geo. II. cap. 19, destroying goss, furze, and fern, in forests and chases, being the covert for deer, subjects the offenders to a penalty from £5 to 40*s.* or to three months' imprisonment

DEER, GREAT, an island of the East Indian sea, near the west coast of the island of Celebes. Long. 119° 35′ E., lat. 5° 12′ S.

DEER, LITTLE, a rocky islet in the Eastern Seas, near the west coast of the island of Celebes. Long. 119° 35′ E., lat. 5° 5′ S.

DEER ISLAND, or MULDONICH, a small island of the Hebrides, near that of Barry.

DEER ISLAND, a small island of Ireland, in the bay of Galway. Long. 9° W., lat. 53° 9′ N.—Also an island on the coast of North America, in Penobscot Bay, about eighteen miles in circumfer-

ence. It is 170 miles north-east of Boston. Long. 68° 30′ W., lat. 41° 10′ N..

DEFACE, *v. a.* } Fr. *effacer*; Lat. *defacio*, of *de* & *facies*, a face.
DEFA'CER, } To mar, disfigure, ruin, destroy. Defacement is the injury done. Defacer, he who performs or accomplishes it.
DEFA'CEMENT. }

But whanne ye fasten nyle be ye maad as ypocrites sorrowful, for thei *defasen* hem silf to seme fastynge to men, treuly I seye to you thei han resseyved her meede. *Wiclif. Matt.* 6.

But what is this image, and how is it defaced? the poor men of Lyons will tell you, that the image of God is purity, and the *defacement* sin. *Bacon.*

Give me leave to speak as earnestly in truly commending it, as you have done in untruly and unkindly *defacing* and slandering it. *Whitgifte.*

Pay him six thousand, and *deface* the bond. *Shakspeare.*

That foul *defacer* of God's handy work
Thy womb let loose to chace us to our graves. *Id.*

Fatal this marriage,
Defacing monuments of conquered France,
Undoing all. *Id.*

As man was the image of God, so was that earthly paradise an image of heaven; both the images are *defaced*, both the first patterns are eternal. *Bishop Hall. Contemplaiont.*

Whose statues, freizes, columns broken lie,
And, though *defaced*, the wonder of the eye. *Dryden.*

One nobler wretch can only rise,
'Tis he whose fury shall *deface*
The stoick's image in this piece. *Prior.*

Thy very weeds are beautiful, thy waste
More rich than other climes' fertility;
Thy wreck a glory, and thy ruin graced
With an immaculate charm which cannot be *defaced*. *Byron.*

DE FACTO, something actually in fact, or existing; in contradiction to de jure, where a thing is only so in justice: as, a king de facto is a person who is actually in possession of a crown; and a king de jure is the person who has a just right to the crown. It was a distinction much in use at the period of the Revolution.

DEFA'ILANCE, *n. s.* Fr. *defaillance*. Failure; miscarriage. Obsolete.

The affections were the authors of that unhappy *defailance*. *Glanville.*

DEFA'LCATE, *v. a.* } Fr. *defalquer*; from
DEFALCA'TION, *n. s.* } *falx*, *falcis* a sickle. To cut off; to lop; to take away part of an allowance.

The tea-table is set forth with its accustomary bill of fare, and without any *defalcation*. *Addison.*

DEFA'LK, *v. a.* See DEFALCATE. To cut off; to lop away.

What he *defalks* from some insipid sin, is but to make some other more gustful. *Decay of Piety.*

DEFAME, *v. a.* & *n. s.* } Fr. *defamer*; It. *diffamare*; Span. and Port. *defamar*; Latin, *defamare*, from Greek, φημη, fame, and *de*, privative. To slander, make infamous, calumniate, deprive of good fame or honor by words or deeds. Defamatory, is libellous; tending to defame. The substantives are obvious in their meaning. In Wiclif's translation of the New Testament, this word is used in the sense of spreading fame or a report; the *de* being only an expletive.
DEFAMER, *n. s.*
DEFAMING, *n. s.*
DEFAMATION,
DEFAMATORY, *adj.* }

And the yghen of hem weren opened, and Jhesus thretenyde hem and seide se ye that no man wite. But thei gheden out and *defameden* him thorugh al that lond. *Wiclif. Matt.* 9.

I heard the *defaming* of many. *Jer.* xx. 10.

Many doughty knights he in his days
Had done to death,
And hung their conquered arms for more *defame*
On gallowtrees. *Spenser.*

My guilt thy growing virtues did *defame*;
My blackness blotted thy unblemished name. *Dryden.*

Be silent, and beware, if such you see;
'Tis *defamation* but to say, that's he. *Id.*

Augustus, conscious to himself of many crimes, made an edict against lampoons and satires, and *defamatory* writings. *Id.*

Defamation is the uttering of contumelious language of any one, with an intent of raising an ill fame of the party; and this extends to writing, as by *defamatory* libels; and to deeds, as reproachful postures, signs, and gestures. *Ayliffe.*

It may be a useful trial of the patience of the *defamed*, yet the *defamer* has not the less crime. *Government of the Tongue.*

The most eminent sin is the spreading of *defamatory* reports. *Id.*

They live as if they professed Christianity merely in spite, to *defame* it. *Decay of Piety.*

Many dark and intricate motives there are to detraction and *defamation*; and many malicious spies are searching into the actions of a great man. *Addison.*

DEFAMATION is punishable according to the nature of the offence, either by action upon the case at common law, or by statute in the ecclesiastical court.

DEFA'TIGATE, *v. a.* } Lat. *defatigo*. To
DEFATIGA'TION, *n. s.* } weary; to tire.

The power of these men's industries, never *defatigated*, hath been great. *Dr. Maine.*

DEFA'ULT, *v. a.* & *n. s.* } Old Fr. *défault*;
DEFA'ULTER, *n. s.* } Ital. *diffalta*; Lat. *defectus*, *de*, privative, and *facio*, to do. To fail in peformance. A default is failure of that which ought to be done legally or morally. Defect; want.

But what man wolde him selfe auise
His conscience, and nought misuse,
He maie well at the first excuse
His God, whiche euer stant in one,
In him there is *defaute* none. *Gower.*

But sith thou mayst not so, give leave a while
To baser wit, his power therein to spend,
Whose grosse *defaults* thy daintie pen may sile
And unaduised ouer sights amend. *Spenser. Sonnets.*

Sundrye victories hadde hee, and sommetime ouer throwes, but neuer in *defaulte* as for his owne parsone, either of hardinesse or polytike order. *Sir T. More.*

We, that know what it is to fast and pray,
Are penitent for your *default* to-day. *Shakspeare.*

In *default* of the king's pay, the forces were laid upon the snbject. *Davies.*

Let me not rashly call in doubt
Divine prediction: what if all foretold
Had been fulfilled, but through mine own *default*,
Whom have I to complain of but myself? *Milton.*

Partial judges we are of our own excellencies, and other men's *defaults*. *Swift.*

Cooks could make artificial birds and fishes, in *default* of the real ones. *Arbuthnot on Coins.*

DEFEA'SANCE. } Fr. *defaisance;* Ital. DEFEASIBLE. } *defaciemento;* Law Lat. *defeisantia*. The act of annulling or abrogating any contract or stipulation.

That hoary king, with all his train,
Being arrived where that champion stout,
After his foe's *defeasance*, did remain,
Him goodly greets, and fair does entertain.
Spenser.

He came to the crown by a *defeasible* title, so was never settled. *Davies.*

Defesance is a condition annexed to an act; as to an obligation, a recognizance, or statute, which performed by the obligee, or the cognizee, the act is disabled and made void, as if it had never been done. *Cowell.*

DEFEASANCE, or DEFEISANCE. The difference between a common condition and a defeasance is, that the condition is annexed to, or inserted in, the deed; and the defeasance is a deed by itself, concluded and agreed on between the parties, and having relation to another deed.

DEFEAT, *v. a.* & *n. s.* } Old Fr. *desfaite,* DEFEATURE, *n s.* } from Lat. *de*, privative, and *facere*, to complete an action. To overthrow; to frustrate; undo; mar. Shakspeare says, 'defeat thy favor,' meaning disguise thy face; and defeatures of the face mean disfigurations of it.

They invaded Ireland, and were *defeated* by the lord Mountjoy. *Bacon.*

To his accusations
He pleaded still not guilty, and alledged
Many sharp reasons to *defeat* the law. *Shakspeare.*

Defeat thy favour with usurped beard.
Ye gods, ye make the weak most strong. *Id.*

Grief hath changed me,
And careful hours, with time's deformed hand,
Hath written strange *defeatures* in my face. *Id.*

Death,
Then due by sentence when thou didst transgress,
Defeated of his seizure many days,
Given thee of grace. *Milton.*

He finds himself naturally to dread a superior Being, that can *defeat* all his designs, and disappoint all his hopes. *Tillotson.*

End Marlborough's work, and finish the *defeat*. *Addison.*

Oh, more than all!—untired by time:
Which, nor *defeated* hope, nor baffled will,
Could render sullen were she ne'er to smile,
Nor rage could fire, nor sickness fret to vent
On her one murmur of his discontent. *Byron.*

DEFECA'TION. *n. s.* } Lat. *defæco*. From DE'FECATE, *v. a.* & *adj.* } *de* and *fæx*, *fæcis*, filth. To purge or make clear from lees; to purify.

This liquor was very *defecate*, and of a pleasing golden colour. *Boyle.*

The blood is not sufficiently *defecated* or clarified, but remains muddy, *Harvey.*

We *defecate* the notion from materiality, and abstract quantity, place, and all kind of corporeity from it. *Glanville.*

Provide a brazen tube
Inflext; self-taught and voluntary flies
The *defecated* liquor, through the vent
Ascending; then, by downward tract conveyed,
Spouts into subject vessels lovely clear. *Philips.*

DEFE'CT, *n. s.* & *v. n.* } Fr. *défaut;* Ital. DEFE'CTION, *n. s.* } *defetto;* Span. *defecto;* Lat. *defec-* DEFE'CTIVE, *adj.* } *tus*, from *de* privative and *facio*, *factus*, to do. As a DEFE'CTIVELY, *adv.* } neuter verb, to be DEFE'CTIVENESS, *n. s.* } deficient; to fall short of; to fail. Defect, as a DEFE'CTIBLE, *adj.* } substantive, is want; insufficiency; failure of DEFECTIBI'LITY, } that which is proper to a person or thing; and hence injury; mistake; error. Defection is a falling away; an act or course of apostasy; an abandonment: defectible, imperfect; wanting: defectibility, a state of deficiency, or imperfection.

This *defection* and falling away from God was first found in angels, and afterwards in men. *Raleigh.*

We had rather follow the perfections of them whom we like not, than in *defects* resemble them whom we love. *Hooker.*

Neither can this be meant of evil governours or tyrants, but of some perverseness and *defection* in the very nation itself. *Bacon.*

Oft 'tis seen
Our mean secures us, and our mere *defects*
Prove our commodities. *Shakspeare.*

You praise yourself,
By laying *defects* of judgment to me. *Id.*

Errors have been corrected, and *defects* supplied. *Davies.*

He was diverted and drawn from hence by the general *defection* of the whole realm. *Id.*

Some lost themselves in attempts above humanity; yet the enquiries of most *defected* by the way, and tired within the sober circumference of knowledge. *Browne's Vulgar Errours.*

Nor will polished amber, although it send forth a gross and corporeal exhalement, be found a long time *defective* upon the exactest scales. *Id.*

The extraordinary persons, thus highly favoured, were for a great part of their lives in a *defectible* condition. *Hale.*

The corruption of things corruptible depends upon the intrinsical *defectibility* of the connection or union of the parts of things corporal. *Id. Origin of Mankind.*

Men, through some *defect* in the organs, want words, yet fail not to express their universal ideas by signs. *Locke.*

It will very little help to cure my ignorance, that this is the best of four or five hypotheses proposed, which are all *defective*. *Id.*

If we fall away after tasting of the good word of God, how criminal must such a *defection* be! *Atterbury.*

'Trust not yourself; but, your *defects* to know,
Make use of ev'ry friend—and ev'ry foe. *Pope.*

Had this strange energy been less,
Defect had been as fatal as excess. *Blackmore.*

If it renders us perfect in one accomplishment, it generally leaves us *defective* in another. *Addison.*

The lowness often opens the building in breadth, or the *defectiveness* of some other particular makes any single part appear in perfection. *Id.*

There is more evil owing to our original *defection* from God, and the foolish and evil dispositions that are found in fallen man. *Watts.*

And if youth has less of that prudence which is necessary to manage a family, yet the parents and elder friends of young married persons are generally at hand to afford their advice, which amply supplies that *defect*. *Franklin.*

But once achieved—though barbarous wreck o'erthrow
The sacred fane, and lay its glories low;
Yet shall the sculptured ruin rise to day,
Graced by *defect*, and worshipped in decay.
Sheridan.

DEF'END, *v. a.*
DEFE'NCE, *v. a.* & *n. s.*
DEFE'NCELESS, *adj.*
DEFE'NDABLE, or
DEFE'NDIBLE,
DEFE'NDANT, *n. s.* & *adj.*
DEFE'NDER,
DEFENSA'TIVE, *n. s.*
DEFENS'IBLE, *adj.*
DEFEN'SIVE, *adj.* & *n. s.*
DEFEN'SIVELY, *adv.*
DEFE'NST, *past part.*

Fr. *defendre*; Span. *defender*; Ital. *difendere*; Lat. *defendere*, *defensus*, from σφενδονω, 'to fight with a sling,' as Minsheu suggests. To protect; shield; support; make secure; vindicate. Hence to repel; keep off, from the Latin verb; and therefore to forbid or beat off; to prohibit, from the French. See the examples from Chaucer and Milton. To defence, though obsolete, is used as an active verb in the received translation of the Bible. Defenceless is, without protection: defendible, that which may be defended, as is also defensible: and hence the latter likewise signifies justifiable; right: defendant is used as an adjective by Shakspeare. It and defender seem, in a general sense, synonymous; but, legally, the defendant is the party to a suit, who is sued or accused, A defensative is a guard, or, in surgery, a protecting bandage; a plaster. A defensive is also that which serves to defend. The adjective means proper for defence, or protection, as distinguished from assault. The adverb and participle explain themselves.

Lo this same thing that ghe ben sorouful aftir god, hou mych bisynesse it worchith in ghou, but *defendyng*, but yndignacioun, but drede, but desier, but loue, but veniaunce. *Wiclif.* 2 *Cor.* vii.

My *defence* to hem that axen me, that is whethir we han not power to ete and drynke? *Id.* 1 *Cor.* 9.

Deliver me from mine enemies, O my God: *defend* me from them that rise up against me. *Psalm* lix. 1.

Rehoboam dwelt in Jerusalem, and built cities for *defence* in Judah. 2 *Chron.* ii. 5.

O Thomas, jeo vous dis, Thomas, Thomas!
This maketh the fend, this muste ben amended,
Ire is a thing that high God hath *defended*.
Chaucer. Cant. Tales.

Wars preventive, upon just fears, are true *defensives*, as well as on actual invasions. *Bacon.*

They must make themselves *defensible* both against the natives and against strangers. *Id.*

Heaven *defend* your souls, that you think
I will your serious and great business scant.
Shakspeare.

Banish your *defenders*, till at length
Your ignorance deliver you,
As most abated captives, to some nation
That won you without blows. *Id.*

A field,
Which nothing but the sound of Hotspur's name
Did seem to make *defensible*. *Id.*

Line and new repair our towns of war
With men of courage, and with means *defendant*. *Id.*

This is the day appointed for the combat,
And ready are the' appellant and *defendant*. *Id.*

Stout men of arms, and with their guide of power,
Like Troy's old town *defenst* with Ilion's tower.
Fairfax.

My unpreparedness for war testifies for me that I am set on the *defensive* part. *King Charles.*

O sons! like one of us man is become,
To know both good and evil, since his taste
Of that *defended* fruit. *Milton.*

My sister is not so *defenceless* left
As you imagine: she has a hidden strength
Which you remember not. *Id.*

A village near it was *defended* by the river. *Clarendon.*

His majesty, not at all dismayed, resolved to stand upon the *defensive* only. *Id.*

So lawyers, lest the Bear *defendant*,
And plaintiff Dog, should make an end on't;
Do stave and tail with writs of error,
Reverse of judgment, and demurrer. *Hudibras.*

A very unsafe *defensative* it is against the fury of the lion, and surely no better than virginity, or blood royal, which Pliny doth place in cock-broth. *Browne's Vulgar Errours.*

Severe *defences* may be made against wearing any linen under a certain breadth. *Temple.*

The use of wine is little practised, and in some places *defended* by customs or laws. *Id.*

Undoubtedly there is no way so effectual to betray the truth, as to procure it a weak *defender*. *South.*

If the bishop has no other *defensatives* but excommunication, no other power but that of the keys, he may surrender up his pastoral staff. *Id.*

And here the' access a gloomy grove *defends*
And here the' unnavigable lake extends. *Dryden.*

Do'st thou not mourn our power employed in vain,
And the *defenders* of our city slain? *Id.*

He would not be persuaded by danger to offer any offence, but only to stand upon the best *defensive* guard he could. *Sidney.*

Let me be foremost to *defend* the throne,
And guard my father's glories and my own.
Pope.

Having often heard Venice represented as one of the most *defensible* cities in the world, I informed myself in what its strength consists. *Addison.*

There is nothing so bad which will not admit of something to be said in its *defence*. *Sterne.*

Those high towers, out of which the Romans might more conveniently fight with the *defendants* on the wall, those also were broken by Archimedes' engines. *Wilkins's Math. Magic.*

I conceive it very *defensible* to disarm an adversary, and disable him from doing mischief. *Collier.*

If I could not avoid his company, why did I not arm myself? Why did I venture *defenceless* into so much danger. *Mason.*

The car of victory, the plume, the wreath,
Defend not from the bolt of fate, the brave.
Beattie.

DEFENDER OF THE FAITH. Fidei defensor, a peculiar title belonging to the king of England; as Catholicus to the king of Spain, and Christian-

issimus to the king of France, &c. These titles were originally given by the popes. That of Fidei defensor was first conferred by Leo X. on king Henry VIII. for his memorable book against Martin Luther; and the bull for it bears date quinto idus Octob. 1521. It was afterwards confirmed by Clement VII. Chamberlayne says, the title belonged to the kings of England before that time; and for proof hereof appeals to several charters granted to the university of Oxford: so that pope Leo's bull was only a renovation of the ancient right.

DEFE'R, *v. a.* & *v. n.* Fr. *differer;* Span. *differir;* Ital. *differire;* Lat. *differre*, from *de* and *fero*, to bear away. To put away for a time; to put off; delay; withhold. It is also used for refer, and thus becomes the parent of the substantive deference.

The commissioners *deferred* the matter unto the earl of Northumberland, who was the principal man of authority in those parts *Bacon.*

He will not long *defer*
To vindicate the glory of his name
Against all competition, nor will long
Endure it. *Milton.*

Neither is this a matter to be *deferred* till a more convenient time of peace and leisure. *Swift.*

Inure thyself betimes to the love and practice of good deeds; for the longer thou *deferrest* to be acquainted with them, the less every day thou wilt find thyself disposed to them. *Atterbury.*

Defer the promised boon the goddess cries. *Pope.*

Be wise to-day; 'tis madness to *defer;*
Next day the fatal precedent will plead;
Thus on, till wisdom is pushed out of life. *Young.*

DE'FERENCE, *n. s.* Fr. *deference.* Regard; respect. See DEFER.

Virgil could have excelled Varius in tragedy, and Horace in lyric poetry, but out of *deference* to his friends he attempted neither. *Dryden.*

A natural roughness makes a man uncomplaisant to others; so that he has no *deference* for their inclinations, tempers, or conditions. *Locke.*

He may be convinced that he is in an error, by observing those persons, for whose wisdom and goodness he has the greatest *deference*, to be of a contrary sentiment. *Swift.*

Deference is the most complicate, the most indirect, and the most elegant of all compliments. *Shenstone.*

Most of our fellow-subjects are guided either by the prejudice of education, or by a *deference* to the judgment of those who, perhaps, in their own hearts, disapprove the opinions which they industriously spread among the multitude. *Addison.*

We ought to show the regard, *deference*, and honour, which belong to superiors; and the candour, integrity, and benevolence, we owe to all. *Mason.*

DE'FERENT, *adj.* & *n. s.* From Lat. *deferens*, of *defero.* See DEFER. That which carries or conveys. That carries up and down.

The figures of pipes or concaves, through which sounds pass, or of other bodies *deferent*, conduce to the variety and alteration of the sound. *Bacon.*

It is certain, however, it crosses the received opinion, that sounds may be created without air, though air be the most favourable *deferent* of sounds. *Id.*

DEFFAND (Marie du), a French lady, distinguished both for her talents and extensive acquaintance with the literati of the last century, was born in 1696, and was the daughter of Gaspard de Vichy, compte de Champ-Rond. She received an excellent education, but no care seems to have been taken to regulate her temper and moral habits, which displayed throughout her life a disgusting portion of selfishness. In 1718 she married J. B. J. du Deffand, marquis de la Lande, whose ancestors had signalised themselves by their attachment to the dukes of Burgundy. Madame du Deffand left no monument of her abilities except her Correspondence, which has been highly praised by D'Alembert, as affording a model of epistolary style. She died in 1780, having, during the last thirty years of her life, been afflicted with blindness. In 1810 appeared Correspondance inedite de Madame du Deffand avec D'Alembert, Montesquieu, le president Henault, la Duchesse du Maine; Mesdames de Choiseul, de Stael; le Marquis d'Argens, le Chevalier d'Aydie, &c., 3 vols. 8vo. Her Letters to Horace Walpole have also been printed.

DEFIANCE. See DEFY.

DEFI'CIENCE, or DEFI'CIENCY, *n. s.* DEFI'CIENT, *adj.* } Lat. *deficio; de* privative, and *facio*, to make. Want, imperfection, defect. Deficient; defective, imperfect. See DEFECT.

Figures are either simple or mixed: the simple be either circular or angular; and of circular, either complete, as circles, or *deficient*, as ovals. *Wotton.*

O woman! best of all things as the will
Of God ordained them: his creating hand
Nothing imperfect or *deficient* left. *Milton.*

Thou in thyself art perfect, and in thee
Is no *deficience* found. *Id.*

Scaliger finding a defect in the reason of Aristotle, introduceth one of no less *deficiency* himself. *Browne's Vulgar Errours.*

Neither Virgil nor Homer were *deficient* in any of the former beauties. *Dryden.*

The characters of comedy and tragedy are never to be made perfect, but always to be drawn with some specks of frailty and *deficience*, such as they have been described to us in history. *Id.*

Several thoughts of the mind, for which we have either none or very *deficient* names, are diligently to be studied. *Locke.*

What great *deficience* is it if we come short of others? *Sprat.*

There is no burden laid upon our posterity, nor any *deficiency* to be hereafter made up by ourselves, which has been our case in so many other subsidies. *Addison.*

DEFI'LE, *v. a.* & *n. s.* DEFI'LER, *n. s.* DEFI'LEMENT. } Compounded of *de* and foul. Sax. afylan. Goth. *fyla;* Belg. *vuyl;* from the Gr. φαυλος, vile, unclean.—Minsheu. To make foul, or unclean; to pollute, violate, corrupt, taint; and hence to calumniate.

That which dieth of itself he shall not eat to *defile* himself therewith. *Lev.* xxii. 8.

Forgetfulness of good turns, *defiling* of souls, adultery, and shameless uncleanness. *Wisd.* xiv. 26.

There is a thing, Harry, known to many in our land by the name of pitch; this pitch, as ancient writers do report, doth *defile*. *Shakspeare.*

Lust,
By unchaste looks, loose gestures, and foul talk,
Lets in *defilement* to the inward parts. *Milton.*

God requires rather that we should die, than *defile* ourselves with impieties. *Stillingfleet.*

Every object his offence reviled;
The husband murdered, and the wife *defiled*. *Prior.*

He is justly reckoned among the greatest prelates of this age, however his character may be *defiled* by mean and dirty hands. *Swift.*

Let not any instances of sin *defile* your requests. *Wake.*

The unchaste are provoked to see their vice exposed, and the chaste cannot rake into such filth without danger of *defilement*. *Spectator.*

At the last tremendous day, I shall hold forth in my arms my much wronged child, and call aloud for vengeance on her *defiler*. *Addison.*

Thus when Cambyses led his barbarous hosts
From Persia's rocks to Egypt's trembling coasts,
Defiled each hallowed fane, and sacred wood,
And, drunk with fury, swelled the Nile with blood.
Darwin.

DEFI'LE, *v. n.* & *n. s.* Fr. *defile*, from file, a line of solders, itself derived from Lat. *filum*, a thread. To pass off in files; a narrow passage; a long narrow pass; a lane.

There is in Oxford a narrow *defile*, to use the military term, where the partisans used to encounter. *Addison.*

It has been mentioned by a writer of military manœuvres, that *defiling* should be performed with rapidity, &c. *James.*

DEFILE, in war, a narrow lane or passage, through which a company of horse or foot can pass only in file, by making a small front; so that the enemy may take an opportunity to stop their march, and to charge them with so much the more advantage, as those in front and rear cannot reciprocally come to the relief of one another.

DEFI'NE, *v. a.* & *v. n.*
DEFIN'ABLE, *adj.*
DEFIN'ER, *n. s.*
DEF'INITE, *n. s.* & *adj.*
DEF'INITENESS,
DEFINIT'ION,
DEFIN'ITIVE,
DEFIN'ITIVELY.
DEFIN'ITIVENESS.

Fr. and Port. *definer*; Spanish, *definir*; Ital. *diffinire*; Lat. *definire*. From *do* and *finem*, to give a limit. To set a limit by words or actions; to mark a bound. As a neuter verb, to decide, determine. Definable is, capable of being defined. Definer, he who defines; and hence he who explains or describes a thing. Definite is, precise; exact; determined; and sometimes it is used as a substantive. Definiteness is, certainty; limitedness. Definition, the act or form of defining; the concise description of a thing. Definitive is, determinate; express; final. Definitiveness, decisiveness.

The unjust judge is the capital remover of landmarks, when he *defineth* amiss of lands and properties. *Bacon.*

Idiots in this case of favour,
Would be wisely *definite*. *Shakspeare.*

Definitively thus I answer you:
Your love deserves my thanks; but my desert,
Unmeritable, shuns your high request. *Id.*

Bellarmine saith, because we think that the body of Christ may be in many places at once, locally and visibly; therefore we may say and hold, that the same body may be circumspectively and *definitively* in more places at once. *Hall.*

Other authors write often dubiously, even in matters wherein is expected a strict and *definitive* truth. *Browne's Vulgar Errours.*

Definitions do not tell an sit, but quid sit; the first is to be supposed before any *definition* is to be inquired after. *Bishop Taylor.*

The Supreme Nature we cannot otherwise define, than by saying it is infinite; as if infinite were *definable*, or infinity a subject for our narrow understanding. *Dryden.*

I drew my *definition* of poetical wit from my particular consideration of him; for propriety of thoughts and words is only to be found in him. *Id.*

Though *defining* be thought the proper way to make known the proper signification, yet there are some words that will not be *defined*. *Locke.*

Whose loss can'st thou mean,
That dost so well their miseries *define*? *Sidney.*

Hither to your arbour divers times he repaired, and here, by your means, had the sight of the goddess, who, in a *definite* compass, can set forth infinite beauty. *Id.*

Concerning the time of the end of the world the question is, whether that time be *definable* or *Burnet's Theory.*

So universally does repetition contribute to our pleasure in the fine arts, that beauty itself has been *defined* by some writers to consist in a due combination of uniformity and variety. *Darwin.*

Your God, forsooth, is found
Incomprehensible and infinite;
But is he therefore found? Vain searcher, no:
Let your imperfect *definition* show,
That nothing you, the weak *definer*, know. *Prior.*

When the rings appeared only black and white, they were very distinct and well *defined*, and the blackness seemed as intense as that of the central spot. *Newton.*

What is man? Not a reasonable animal merely; for that is not an adequate and distinguishing *definition*. *Bentley.*

Special bastardy is nothing else but the *definition* of the general; and the general, again, is nothing else but a *definite* of the special. *Ayliffe.*

DEFINITE, in grammar, is applied to an article that has a precise determinate signification; such as the article *the* in English, *le* and *la* in French, &c., which fix and ascertain the noun to which they belong; whereas *a*, *an*, *un*, or *une*, mark nothing particular, and are therefore called indefinite. See ARTICLE.

DEFLA'GRABLE, *adj.*
DEFLAGRA'TION, *n. s.*
DEFLAGRABI'LITY, *n. s.*

From Lat. *deflagro*. Combustibility; the quality of taking fire, and burning totally away.

The true reason why paper is not burned by the flame that plays about it, seems to be, that the aqueous part of the spirit of wine, being imbibed by the paper, keeps it so moist, that the flame of the sulphureous parts of the same spirit cannot fasten on it;

and therefore, when the *deflagration* is over, you shall always find the paper moist. *Boyle.*

Our chymical oils, supposing that they were exactly pure, yet they would be, as the best spirit of wine is, but the more inflammable and *deflagrable*. *Id.*

We have spent more time than the opinion of the ready *deflagrability*, if I may so speak, of salt petre did permit us to imagine. *Id.*

DEFLECT', *v. n.* DEFLEC'TION, *n. s.* DEFLEX'URE, *n. s.* } From Lat. *de* and *flecto*, to turn. To turn aside; to deviate.

At some parts of the Azores the needle *deflecteth* not, but lieth in the true meridian: on the other side of the Azores, and this side of the equator, the north point of the needle wheeleth to the west.

Browne's Vulgar Errours.

Needles incline to the south on the other side of the equator; and at the very line, or middle circle, stand without *deflection*. *Id.*

For, did not some from a straight course *deflect*,
They could not meet, they could no world erect.

Blackmore.

As by the cultivation of various sciences, a language is amplified, it will be more furnished with words *deflected* from their original sense.

Johnson. Preface to Dictionary.

DEFLECTION OF THE RAYS OF LIGHT, a property which Dr. Hook observed in 1675, and read an account of before the Royal Society, March 18th, the same year. He says he found it different both from reflection and refraction, and that it was made towards the surface of the opaque body, perpendicularly. This property Sir Isaac Newton calls inflection.

DEFLOUR', *v. a.* DEFLOUR'ER, *n. s.* DEFLORA'TION, *n. s.* } Fr. *deflorer*; Span. *desflorar*; Lat. *deflorare*; from *de* privative and *floreo*, *flos*, *floris*, a flower. To violate a virgin; hence to mar or deface any thing that is beautiful; to select the most valuable of a number of things. The meaning of the substantives is obvious.

How on a sudden lost,
Defaced, *defloured*, and now to death devote!

Milton.

The laws of Normandy are, in a great measure, the *defloration* of the English laws, and a transcript of them. *Hale.*

If he died young, he died innocent, and before the sweetness of his soul was *defloured* and ravished from him by the flames and follies of a froward age. *Taylor.*

I have often wondered, that those *deflourers* of innocence, though dead to all the sentiments of virtue and honour, are not restrained by humanity. *Addison.*

DEFLU'X, *n. s.* DEF'LUVOUS, *adj.* DEFLU'XION, *n. s.* } Lat. *defluxio*, from *de*, and *fluo*, to flow. The flow of humors downwards.

Both bodies are clammy, and bridle the *deflux* of humours, without penning them in too much. *Bacon.*

We see that taking cold moveth looseness by contraction of the skin and outward parts; and so doth cold, likewise, cause rheums and *defluxions* from the head. *Id.*

DE'FLY, *adv.* From DEFT, which see. Dexterously; skilfully. Obsolete. Properly deftly.

Lo, how finely the graces can it foot
To the instrument;
They dauncen *defly*, and singen soote,
In their merriment. *Spenser.*

DE FOE (Daniel), a celebrated miscellaneous writer of the last and preceding century. When king William, to allay the dissent of the people, was obliged to dimiss his Dutch guards, De Foe ridiculed the enemies of government in a well-known poem, called the True-Born Englishman. He next wrote a tract, called the Shortest Way with the Dissenters, a satire on those who now, having the power, wished to retaliate on the Romanists and dissenters those persecutions they had loudly complained of when inflicted on themselves. For this he was sentenced to the pillory, which so little intimidated him, that, in defiance of this usage, he wrote a Hymn to the Pillory. It is unnecessary to enumerate all his publications: the following are the principal. The History of the Plague in 1665; a novel, entitled The History of Colonel Jack; a New Voyage Round the World by a Company of Merchants, printed for Bettesworth, 1725; The History of Roxana; Memoirs of a Cavalier; The History of Moll Flanders; a religious romance, entitled Religious Courtship; and The Life and Adventures of Robinson Crusoe, a well-known tale, of which there have been editions without number. The basis of this popular story was afforded by the real history of a Scottish sailor, Alexander Selkirk, who had been left ashore on the island of Juan Fernandez. Selkirk used to relate his adventures at a coffee-house in London, where money was frequently given him by the company, and where De Foe so often heard them, that out of them he formed the above mentioned history. De Foe's malignant enemies have misrepresented this to his disadvantage. He died at Islington in 1731.

DEFŒDA'TION, *n. s.* Lat. from *defœdus*, of *de* and *fœdus*, foul. The act of making filthy; pollution. This is not an English word; at least, to make it English, it should be written *defœdation*, says Dr. Johnson.

What native unextinguishable beauty must be impressed and instincted through the whole, which the *defœdation* of so many parts by a bad printer, and a worse editor, could not hinder from shining forth.

Bentley.

DEFO'RCEMENT, *n. s.* from force. A withholding of lands and tenements by force from the right owner. 'It may be grounded,' says Blackstone, 'on the disability of the party deforced.'

DEFORM', *v. a.* & *adj.* DEFORM'ED, *part. adj.* DEFORMA'TION, *n. s.* DEFORM'EDLY, *adv.* DEFORM'EDNESS, *n. s.* DEFORM'ITY. } Fr. *deformér*; Ital. *difformare*; Span. *desformár*; Lat. *deformare*; i. e. *demere formam*, to take away beauty. To disfigure; to mar the form of any thing; to dishonor, disgrace. Deformation is a defacing, disfiguring. Deformity is ugliness, irregularity of form; hence inordinateness, ridiculousness.

I did proclaim,
That whoso killed that monster most *deform*,
Should have mine only daughter to his dame.
Spenser.

I that am curtailed of all fair proportion,
Cheated of feature by dissembling nature,
Deformed, unfinished, sent before my time
Into this breathing world, scarce half made up.
Shakspeare.

Where sits *deformity* to mock my body,
To shape my legs of an unequal size,
To disproportion me in every part. *Id.*

No glory is more to be envied than that of due reforming either church or state, when *deformities* are such, that the perturbation and novelty are not like to exceed the benefit of reforming. *King Charles.*

Why should not man,
Retaining still divine similitude
In part, from such *deformities* be free,
And for his Maker's image sake, exempt?
Milton.

So spake the grisly terror; and in shape,
So speaking and so threatening, grew tenfold
More dreadful and *deform*. *Id.*

Old men with dust *deformed* their hoary hair.
Dryden.

It is well known what strange work there has been in the world, under the name and pretence of reformation; how often it has turned out to be, in reality, *deformation*; or, at best, a tinkering sort of business, where, while one hole has been mended, two have been made. *Bishop Horne.*

Affectation is certain *deformity*; by forming themselves on fantastic models, the young begin with being ridiculous, and often end in being vicious. *Blair.*

Had no Power presented me
The possibility of change, I would
Have done the best which Spirit may, to make
Its way, with all Deformity's dull, deadly,
Discouraging, weight upon me, like a mountain.
Byron.

DEFORMITY may be defined, in general, the want of uniformity; though it certainly does not, as some have supposed, include the want of that perfect degree of uniformity that is necessary to constitute beauty. Many are the objects in nature that cannot be said to be beautiful, and yet are by no means deformed. Deformity is either natural or moral. These are both referred by Mr. Hutcheson to an internal sense; and our perceptions of them, as he supposes, arise from an original arbitrary structure of our own minds, by which certain objects, when observed, are rendered the occasions of certain sensations and affections. See BEAUTY.

DEFRAUD, *v. a.* DEFRAUDA'TION, *n. s.* DEFRAUDER. Fr. *defrauder*; Span. *defraudár*; Lat. *defraudare*, from *de* and *fraus*, *fraudis*, deceit. To cheat; deceive; beguile of something: always taking *of* before the thing gained. Defraudation is privation by deceit or guile. Defrauder, he who cheats another of his property.

My son, *defraud* not the poor *of* his living, and make not the needy eyes to wait long. *Eccl.* iv. 1.

Churches seem injured and *defrauded of* their rights, when places, not sanctified as they are, prevent them unnecessarily in that pre-eminence and honour.
Hooker.

Their impostures are worse than any other, deluding not only into pecuniary *defraudations*, but the irreparable deceit of death. *Browne's Vulgar Errours.*

There they, who brothers better claim disown,
Expel their parents, and usurp the throne;
Defraud their clients, and, to lucre sold,
Sit brooding on unprofitable gold. *Dryden.*

There is a portion of our lives which every wise man may justly reserve for his own particular use, without *defrauding* his native country. *Id.*

But now he seized Briseis' heavenly charms,
And *of* my valour's prize *defrauds* my arms. *Pope.*

The profligate in morals grows severe,
Defrauders just, and sycophants sincere.
Blackmore.

DEFRA'Y, *v. a.* DEFRAY'ER, *n. s.* DEFRAY'MENT, *n. s.* Fr. *defrayer*, according to Minsheu, from the old Fr. *fredum*, a fine. Rather, from *de*, and *fra's*, Fr. expense. It may, however, be nothing more than a compound of the English verb, free. To pay expenses; to discharge a charge made; defrayment is, compensation; satisfaction. Defrayer, he who pays or discharges an account.

He would, out of his own revenue, *defray* the charges belonging to the sacrifices. 2 *Mac.* ix. 16.

It is easy to lay a charge upon any town; but to foresee how the same may be answered and *defrayed*, is the chief part of good advisement.
Spenser's State of Ireland.

It is long since any stranger arrived in this part, and therefore take ye no care; the state will *defray* you all the time you stay; neither shall you stay one day the less for that. *Bacon.*

DEFT, *adj.* Sax. ðæfte. Obsolete. Neat; handsome; spruce; fitting.

You go not the way to examine; you must call the watch that are their accusers.——
—— Yea, marry, that's the *deftest* way.
Shakspeare.

Come, high or low,
Thyself and office *deftly* show. *Id. Macbeth.*

Loud fits of laughter seized the guests, to see
The limping god so *deft* at his new ministry.
Dryden.

The wanton calf may skip with many a bound,
And my cur, Tray, play *deftest* feats around. *Gay.*

Young Colin Clout, a lad of peerless meed,
Full well could dance, and *deftly* tune the reed. *Id.*

DEFUNCT', *n. s.* & *adj.* DEFUNC'TION, *n. s.* Lat. *defunctus*, of *de* and *fungor*, to finish. In a state of death; dead.

Nature doth abhor to make his couch
With the *defunct*, or sleep upon the dead.
Shakspeare.

I therefore beg it not
To please the palate of my appetite;
Nor to comply with heat, the young effects
In me *defunct*, and proper satisfaction. *Id*

Here entity and quiddity,
The souls of *defunct* bodies, fly. *Hudibras.*

In many cases, the searchers are able to report the opinion of the physician who was with the patient, as they receive the same from the friends of the *defunct*.
Graunt.

DEFY, *v. a.* & *n. s.* DEFY'ER, *n. s.* DEFI'ANCE. Sax. and Teut. *figan*; Goth. *figa*; Fr. *defier*; Span. *desafier*; Ital. *dissidere*, from Lat. *dissidere*, to differ; because,

says Minsheu, we differ with those whom we defy. To dare; to challenge; to call to combat; to despise; to disdain; to deny. Defy is used as a substantive by Dryden, but not commonly. Defiance is the instrument or mode of challenge; any expression of enmity, abhorrence, or contempt.

I knowe her eke a false dissimulour,
For finally fortune I do *defie*.
Chaucer. Prol. to Cant. Tales.

As many fools that stand in better place,
Garnished like him, that for a tricksy word
Defy the matter. *Shakspeare.*

The fiery Tybalt, with his sword prepared,
Which, as he breathed *defiance* to my ears,
He swung about his head. *Id.*

I once again
Defy thee to the trial of mortal fight. *Milton.*

How many of us can bid *defiance* to death, and suggest answers to absent temptations, which when they come home to us, we fly off, and change our note.
Bp. Hall's Contemplations.

Nor shall it e'er be said that wight
With gantlet blue and bases white,
And round blunt truncheon by his side
So great a man at arms *defyed*. *Hudibras.*

Is it not then high time that the laws should provide, by the most prudent and effectual means, to curb those bold and insolent *defiers* of heaven?
Tillotson.

At this the challenger, with fierce *defy*,
His trumpet sounds; the challenged makes reply:
With clangour rings the field, resounds the vaulted sky. *Dryden.*

Nor is it just to bring
A war without a just *defiance* made. *Id.*

Nobody will so openly bid *defiance* to common sense, as to affirm visible and direct contradictions. *Locke.*

Here let the pippin, fretted o'er with gold,
In fostering straw *defy* the winter's cold;
The hardier russet here will safely keep,
And dusky rennet, with its crimson cheek.
Sheridan.

And one enormous shout of 'Allah!' rose
In the same moment, loud as even the roar
Of war's most mortal engines, to their foes
Hurling *defiance*. *Byron.*

DEGEN'ERATE, *v. n.* & *adj.* } Fr. *dégénérér;*
DEGEN'ERACY, *n. s.* } Span. *degenerar;* Ital. *degenerare;* Latin, *degenero;* from *de* and *genere errare*, to wander from its kind.
DEGEN'ERATENESS, }
DEGEN'ERATIVE, }
DEGEN'EROUS, *adj.* }
DEGEN'EROUSLY, *adv.* }

To fall off from the virtue or fame of one's ancestors; to decline in station, in kind, or in class: as an adjective, unlike or unequal to ancestry; unworthy; base. Degeneracy, degenerateness, and degeneration are synonymous, and signify a state or act that exhibits degradation from the excellence or honor of ancestors; an apostasy or declining from that which is good. Degenerous is synonymous with degenerated.

Most of those fruits that used to be grafted, if they be set of kernels or stones, *degenerate*. *Bacon.*

Thou art like enough
To fight against me under Piercy's pay;
To cog his heels, and curtsy at his frowns,
To show how much thou art *degenerate*.
Shakspeare.

Let not the tumultuary violence of some men's immoderate demands ever betray me to that *degenerous* and unmanly slavery, which should make me strengthen them by my consent. *King Charles.*

In plants, these transplantations are obvious; as barley into oats, of wheat into darnell; and those grains which generally arise among corn, as cockle, aracus, œgilops, and other *degenerations*.
Browne's Vulgar Errours.

So all shall turn *degenerate*, all depraved;
Justice and temperance, truth and faith, forgot!
One man except. *Milton.*

When wit transgresseth decency, it *degenerates* into insolence and impiety. *Tillotson.*

'Tis true, we have contracted a great deal of weakness and impotency by our wilful *degeneracy* from goodness; but that grace, which the gospel offers to us for our assistance, is sufficient for us. *Id.*

Fair, tall, his limbs with due proportion joined;
But of a heavy dull *degenerate* mind,
His soul belied the features of his face;
Beauty was there, but beauty in disgrace. *Dryden.*

Degenerous passion, and for man too base,
It seats its empire in the female race;
There rages, and, to make its blow secure,
Puts flattery on, until the aim be sure. *Id.*

When a man so far becomes *degenerate* as to quit the principles of human nature, and to be a noxious creature, there is commonly an injury done some person or other. *Locke.*

Degenerate from their ancient brood,
Since first the court allowed them food.
Swift.

The ruin of a state is generally preceded by an universal *degeneracy* of manners, and contempt of religion, which is entirely our case at present. *Id.*

How wounding a spectacle is it to see heroes, like Hercules at the distaff, thus *degenerously* employed!
Decay of Piety.

There is a kind of sluggish resignation, as well as poorness and *degeneracy* of spirit, in a state of slavery. *Addison.*

When we think of the infinite purity of God, who cannot behold iniquity; and consider the corrupted and *degenerate* state of human nature; this is apt to make us more apprehensive than is reasonable, of the difficulty of our duty. *Clarke's Sermons.*

Tongues, like governments, have a natural tendency to *degeneration*; we have long preserved our constitution, let us make some struggles for our language. *Johnson. Preface to Dictionary.*

DEGLUTI'TION, *n. s.* Lat. *deglutio*, of *de* and *glutio*, from Gr. γλυζω, to swallow.—Ainsworth. The act or power of swallowing.

When the *deglutition* is totally abolished, the patient may be nourished by clysters. *Arbuthnot on Diet.*

DEGLUTITION, in the animal economy, is performed in the first place by means of the tongue, driving the aliment into the œsophagus or gullet, and then, by the contraction of the sphincter, and the fleshy fibres of the œsophagus, which, lessening its aperture, protrude the contents downward into the stomach. In its course, by pressing the glands, the food itself increases the mucus required for lubrication, and thus easily passes without irritation.

DEGRADE', *v. a.* } Fr. *degradér;* Span
DEGRADA'TION, *n. s.* } *degradár;* Ital. *disgradáre;* from Lat. *de* privative, and *gradus* a step.

To deprive of rank or degree; to reduce from a higher to a lower rank or value. Degradation is the state of deprivation so effected; dismissal from trust or office.

He should
Be quite *degraded*, like a hedgeborn swain,
That doth presume to boast of gentle blood.
Shakspeare.

Nor shalt thou, by descending to assume
Man's nature, lessen or *degrade* thine own.
Milton.

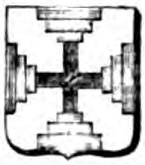
All higher knowledge in her presence falls
Degraded. *Id.*

So deplorable is the *degradation* of our nature, that whereas before we bore the image of God, we now retain only the image of men. *South.*

The word *degradation* is commonly used to denote a deprivation and removing of a man from his degree. *Ayliffe.*

Time hath not yet the features fixed,
But brighter traits with evil mixed;
And there are hues not always faded,
Which speak a mind not all *degraded*
Even by the crimes through which it waded.
Byron. The Giaour.

Degradation from political rank or station was, and is, performed in a different manner in the cases of a peer, a priest, a knight, a gentleman, an officer, &c. In the time of Francis I. M. Fangel, a French officer, having, in a cowardly manner, given up Fontarabia, whereof he was governor, was publicly degraded. On this occasion twenty or thirty cavaliers were assembled, before whom this gentleman was accused of treason and breach of faith by a king at arms. Two scaffolds were erected, the one for the judges, heralds, and pursuivants, and the other for the guilty cavalier, who was armed at all points, and his shield placed on a stake before him, with the point reversed. On one side assisted twelve priests, in surplices, who sung the vigils of the dead. At the close of each psalm they made a pause, during which the officers of arms stripped the condemned of some piece of his armour, beginning with his helmet, and proceeding thus till he was quite disarmed; which done, they broke the shield in three pieces with a hammer. Then the king at arms emptied a basin of hot water on the criminal's head; and the judges, putting on mourning habits, went to the church. The degraded was then drawn from off the scaffold with a rope tied under his armpits, laid on a bier, and covered with mortuary clothes; the priests singing some of the prayers for the dead; and then he was delivered to the civil judge and the executioner of justice. Sir Andrew Harcla, earl of Carlisle, being convicted of treason, 18 Edward II. coram rege: after judgment was pronounced, his sword was broken over his head, and his spurs hewn off his heels; Sir Anthony Lucy, the judge, saying to him: 'Andrew, now thou art no knight, but a knave.' It has been maintained that the king may degrade a peer; but it appears from later authorities, that he cannot be degraded but by act of parliament. We have an instance of ecclesiastical degradation, before condemnation to death, in the eighth century, at Constantinople, in the person of the patriarch Constantine, whom Constantine Copronymus caused to be executed. He was made to ascend the ambo; and the patriarch Nicetas sent some of his bishops to strip him of the pallium, and anathematised him: then they made him go out of the church backwards. When Cranmer, archbishop of Canterbury, was degraded by order of queen Mary, they dressed him in episcopal robes, made only of canvas, put the mitre on his head, and the pastoral staff in his hand; and in this attire showed him to the people. They then stripped him piece by piece. Pope Boniface pronounced that six bishops were required to degrade a priest; but the difficulty of assembling so many bishops, rendered the punishment frequently impracticable.



Degraded, in heraldry, the name of a cross when it has steps at each end, as *argent*, a cross, degraded *sable*. Name Wentworth.

DEGREE', *n. s.* Fr. *degrè*; Port. *grao*; Span. and Ital. *grado*, from Lat. *gradus*, a step. See Degrade. Rank; quality; order; place of relative merit or precedency; measure; proportion. Variously applied in the sciences: see the following articles. By degrees is, gradually; by steps, or graduated progress.

Surely men of low *degree* are vanity, and men of high *degree* are a lye: to be laid in the balance, they are altogether lighter than vanity. *Psalm* lxii. 9.

Methinkith it accordant to reson,
To tell you alle the condition
Of ech of them, so as it semid me,
And which they werin, and of what *degree*,
And eke in what array that they wer in;
And at a knight then woll I first begin.
Chaucer. Prol. to Cant. Tales.

It was my fortune, common to that age,
To love a lady fair, of great *degree*,
The which was born of noble parentage,
And set in highest seat of dignity. *Spenser.*

I embrace willingly the ancient received course and conveniency of that discipline, which teacheth inferior *degrees* and orders in the church of God. *Hooker.*

The book of Wisdom noteth *degrees* of idolatry, making that of worshipping petty and vile idols more gross than simply the worshipping of the creature. *Bacon.*

Degree being vizarded,
The unworthiest shews as fairly in the mask.
Shakspeare.

How vainly do we hope to be perfect at once! it is well for us, if through many *degrees* we can rise to our consummation. *Bishop Hall. Contemplations.*

A strange harmonious inclination
Of all *degrees* to reformation. *Hudibras.*
In minds and manners, twins opposed we see;
In the same sign, almost the same *degree*. *Dryden.*

If all the parts are equally heard as loud as one another, they will stun you to that *degree*, that you will fancy your ears were torn in pieces. *Id.*

As if there were *degrees* in infinite,
And Heaven itself had rather want perfection
Than punish to excess. *Id.*

Farmers in *degree*,
He a good husband, a good housewife she. *Id.*

The several *degrees* of angels may probably have larger views, and be endowed with capacities able to set before them, as in one picture, all their past knowledge at once. *Locke.*

Poesy
Admits of no *degrees*; but must be still
Sublimely good, or despicably ill. *Roscommon.*

But is no rank, no station, no *degree*,
From this contagious taint of sorrow free? *Prior.*

Exulting in triumph now swell the bold notes;
In broken air, trembling, the wild musick floats
Till by *degrees* remote and small,
The strains decay,
And melt away,
In a dying, dying fall. *Pope.*

The unusual extension of my muscles on this occasion, made my face ache on both sides to such a *degree*, that nothing but an invincible resolution and perseverance could have prevented me from falling back to my monosyllables. *Spectator.*

A person who is addicted to play or gaming, though he took but little delight in it at first, by *degrees* contracts a strong inclination towards it. *Id.* No. 447.

Men's prejudices, I was sensible, could only be lessened by *degrees*; and I was firmly of opinion that no change ought ever to be made in quiet times, till the utility of the change was generally acknowledged. *Bishop Watson.*

Without hinting the abolition of the order, [I] strongly insisted on the propriety of obliging them to keep exercises in the schools, as the other candidates for *degrees* did. *Id.*

How numerous were the instances in which juries found a compassionate verdict, in direct contradiction to the plain facts clearly established before them, we do not know; but that these evils must all have existed to a considerable *degree*, no man can doubt. *Sir Samuel Romilly.*

DEGREE, in universities, denotes a quality conferred on the students or members thereof, as a testimony of their proficiency in the arts or sciences, and entitling them to certain privileges.

DEGREE OF LATITUDE. See LATITUDE.

DEGREE OF LONGITUDE. See LONGITUDE.

DEHORT, *v. a.* Lat. *dehortor*; of *de* and *hortor*; Gr. ορω, ωρται, to incite. To dissuade.

One severely *dehorted* all his followers from prostituting mathematical principles unto common apprehension or practice. *Wilkins.*

The apostles vehemently *dehort* us from unbelief. *Ward.*

The author of this epistle, and the rest of the apostles, do every where vehemently and earnestly *dehort* from unbelief: did they never read these *dehortations*? *Id. on Infidelity.*

DEJANIRA, in fabulous history, daughter of Oeneus, king of Ætolia, and wife of Hercules. The centaur Nessus, endeavouring to ravish her, was slain by Hercules with a poisoned arrow. Nessus, when dying, gave his bloody shirt to Dejanira; assuring her that it was a sovereign remedy to cure her husband, if he proved unfaithful. Some time after, Dejanira, suspecting his fidelity, sent him the shirt, which he put on, and was seized with the most excruciating torments. Being unable to support his pains, he retired to Mount Oeta, and erecting a pile of wood set fire to it, and threw himself into the flames; upon which Dejanira killed herself in despair.

DE'ICIDE, *n. s.* From Lat. *deus* and *cædo* A barbarism of Prior's, meant, we suppose to express the death of Christ as being both God and man. Fully believing that such he was, we cannot think that a sober theology will warrant this term.

Explaining how Perfection suffered pain,
Almighty languished, and Eternal died;
How by her patient victor Death was slain,
And earth profaned, yet blessed with *deicide*! *Prior.*

DEJECT', *v. a.* & *adj.* } Old Fr. *déjecter*; Lat.
DEJECT'EDLY, *adv.* } *dejicere*, from *de*, and
DEJECT'EDNESS, *n. s.* } *jacio*, to cast. To cast
DEJECT'ION, } or throw down; de-
DEJECT'URE. } press; debase: hence to afflict in any way; to mar with grief. The adjective signifies cast down; depressed; low in spirits and manner: dejecture, that which is thrown down in a particular way.

No man in that passion doth look strongly, but *dejectedly*: and that repulsion from the eyes diverteth the spirits, and gives heat more to the ears, and the parts by them. *Bacon.*

I am of ladies most *deject* and wretched,
That sucked the honey of his music vows. *Shakspeare.*

The lowest, most *dejectea* thing of fortune,
Stands still in esperance; lives not in fear! *Id.*

What besides
Of sorrow, and *dejection*, and despair,
Our frailty can sustain, thy tidings bring. *Milton.*

The liver should continually separate the choler from the blood, and empty it into the intestines; where there is good use for it, not only to provoke *dejection*, but also to attenuate the chyle. *Ray on the Creation.*

Oh! If I did but steadfastly believe, I could not be *dejected*; for I will not injure myself to say, I offer my mind any inferior consolation to supply this loss. *Lady Russell's Letters.*

Eneas here beheld, of form divine,
A godlike youth in glittering armour shine,
With great Marcellus keeping equal pace,
But gloomy were his eyes, *dejected* was his face. *Dryden.*

Nor think to die *dejects* my lofty mind;
All that I dread is leaving you behind! *Pope.*

The effects of an alkalescent state, in any great degree, are thirst and a *dejection* of appetite, which putrid things occasion more than any other. *Arbuthnot on Aliments.*

A disease opposite to spissitude is too great fluidity, the symptoms of which are excess of animal secretions, as of perspiration, sweat, urine, liquid *dejectures*, leanness, weakness, and thirst *Id.*

Deserted and astonished, he sinks into utter *dejection*; and even hope itself is swallowed up in despair. *Rogers.*

She was *dejected*; she learned an humbler language, and seemed, if she did not trust in God, at least to have renounced her confidence in herself. *Cowper. Private Correspondence.*

Or fondly gay, with unambitious guile,
Attempt no prize but favouring Beauty's smile;
Or bear *dejected* to the lonely grove
The soft despair of unprevailing love. *Sheridan.*

DEJERATION, *n. s.* From Lat. *dejero.* A taking of a solemn oath.

DE'IFORM, *adj.* From Lat. *deus* and *forma.* Of a godlike form.

DE'IFY, *v. a.* Fr. *deifier;* Lat. *deus,* and *fio* to be made. To make like God; to treat as a deity; to praise excessively.

He did again so extol and *deify* the pope, as made all that he had said in praise of his master and mistress seem temperate and passable. *Bacon.*

Persuade the covetous man not to *deify* his money, and the proud man not to adore himself. *South.*

Daphnis, the fields' delight, the shepherds' love,
Renowned on earth, and *deified* above. *Dryden.*

The seals of Julius Cæsar, which we know to be antique, have the star of Venus over them, though they were all graven after his death, as a note that he was *deified.* *Id.*

Half of thee
Is *deified* before thy death. *Prior.*

Thus by degrees, self-cheated of their sound
And sober judgment, that he is but man,
They demi-*deify* and fume him so,
That in due season he forgets it too.
Cowper's Task.

One noble stroke with a whole life may glow,
Or *deify* the canvass till it shine
With beauty so surpassing all below,
That they who kneel to idols so divine
Break no commandment, for high Heaven is there
Transfused, transfigurated. *Byron.*

DEIGN, *v. a.* & *n.* Fr. *daigner;* Lat. *dignor.* As a verb active, to vouchsafe; to think worthy (with some condescension). To grant; allow; permit.

Now Sweno, Norway's king, craves composition;
Nor would we *deign* him burial of his men,
Till he disbursed ten thousand dollars. *Shakspeare.*

Deign to descend now lower, and relate
What may no less perhaps avail us known.
Milton.

O *deign* to visit our forsaken seats,
The mossy fountains, and the green retreats.
Pope.

Yet nature's care, to all her children just,
With richer treasures and an ampler state
Endows at large whatever happy man
Will *deign* to use. *Akenside.*

News have I none that I can *deign* to write,
Save that it rained prodigiously last night.
Cowper. Private Correspondence.

DEINTEGRATE, *v. a.* Lat. from *de* and *integro.* To take from the whole; to spoil; to diminish.

DEIPHON, in fabulous history, a brother of Triptolemus, and son of Celeus and Metanira. When Ceres travelled over the world, she stopped at his father's court, and undertook to nurse him and bring him up. To reward the hospitality of Celeus, the goddess, to make his son immortal, every evening placed him on burning coals, to purify him from his mortal particles. The uncommon growth of Deiphon astonished Metanira, who wished to see what Ceres did to make him so vigorous. She was frightened to see her son on burning coals; and her shrieks disturbing the mysterious operations of the goddess, Deiphon perished in the flames.

DEISCAL, or DEISHEAL, in the ancient British customs, a ceremony originally used in the druidical worship. The temples of the ancient Britons were all circular; and the druids in performing the public offices of their religion, never neglected to make three turns round the altar, from east to west, accompanied by all the worshippers. This was called the deischal, from deas, the right hand, and sul, the sun.

DE'ISM, *n. s.* } Fr. *deisme;* from Lat.
DE'IST, *n. s.* } *deus,* God. See DEITY.
DEIST'ICAL, *adj.* } Strictly, a belief in God, or one God; but generally applied to those who, professing such a belief, reject Revelation. See the following article.

In the second epistle of St. Peter, certain *deists,* as they seem to have been, have laughed at the prophecy of the day of judgment. *Burnet.*

Deism, or the principles of natural worship, are only the faint remnants or dying flames of revealed religion in the posterity of Noah. *Dryden.*

Weakness does not fall only to the share of Christian writers, but to some who have taken the pen in hand to support the *deistical* or anti-christian scheme of our days. *Watts.*

DEISM may properly be used to denote natural religion, as comprehending those truths which have a real foundation in reason and nature; and in this sense it is so far from being opposite to Christianity, that it is one great design of the gospel to illustrate and enforce it. In this sense some of the deistical writers have affected to use it. But deism popularly signifies that system of religion and morals which is supposed to be derived, by the mere force of reason, from the contemplation of the works of nature, and which rejects revelation. In the article REVELATION, we shall present the reader with a complete view of the entire argument on this momentous subject.

DE'ITY, *n. s.* Fr. *deité;* Span. and Port. *dietad;* Arm. *dei,* from Lat. *deitas, deus;* Gr. Διος, God. Applied also to fabulous gods, and the supposed qualities of a divinity.

They on their former journey forward pass,
With pains far passing that long wandering Greek,
That for his love refused *deity.* *Spenser.*

Some things he doth as God, because his *deity* alone is the spring from which they flow; some things as man, because they issue from his mere human nature; some things jointly as both God and man, because both natures concur as principles thereunto.
Hooker.

By what reason could the same *deity* be denied unto Laurentia and Flora, which was given to Venus?
Raleigh.

Give the gods a thankful sacrifice when it pleaseth their *deities* to take the wife of a man from him.
Shakspeare.

Heard you not what an humble suppliant
Lord Hastings was to her for his delivery?
—Who humbly complaining to her *deity,*
Got my lord chamberlain his liberty. *Id.*

With what arms
We mean to hold what anciently we claim
Of *deity,* or empire. *Milton.*

How many millions of wonders doth the very face of the earth offer me; which of these herbs, flowers, trees, leaves, seeds, fruits, is there; what beast, what

worm, wherein we may not see the footsteps of a *deity?* *Bp. Hall. Contemplations.*

Will you suffer a temple, how poorly built soever, but yet a temple of your *deity*, to be razed? *Sidney*

In his eye
And nostril beautiful disdain, and might,
And majesty, flash their full lightnings by,
Developing in that one glance the *Deity*. *Byron.*

DE JURE. See DE FACTO.

DELACAPEDE (Bernard Germain Stephen Laville, count), a French naturalist, of noble family, was born at Agen, December 16th, 1756. He was originally destined for the army, and entered while a youth into the Bavarian service. But his love of science soon procured him the post of keeper of the cabinets in the Jardin du Roi at Paris, for which he abandoned the army, and which he held to the period of the revolution. He composed, as a continuation of the great work of Buffon, the Natural History of Oviparous Quadrupeds and Serpents. He much improved the royal cabinet; and in 1798 published the Natural History of Fishes, 5 vols., 4to. But the events of the revolution now distracted his attention. He became a member of the department of Paris, and in 1791 one of the deputies of that city. He was successively secretary and president of the National Assembly; and was one of the very few conspicuous men who steered in safety through the public storms. He was chosen one of the first members of the National Institute, and on the 20th of January, 1796, carried up an address from a deputation of that body to the council of five hundred, declaring its hatred of royalty. Buonaparte nominated him in 1799 a member of the Conservative Senate; in 1801 he was president of that body, in 1803 grand chancellor of the legion of honor, and in 1804 senator of Paris. He had frequent intercourse with the emperor, to whom he manifested much attachment; but in January, 1814, when the power of his master was tottering, he assumed a new tone, and at the head of the senate recommended peace. At the restoration of the Bourbons, he returned to his studies. His lectures at the Garden of Plants were numerously attended. He published several tracts, and contributed to the Annales du Museum d' Histoire Naturelle, and other periodical works. His History of Cetaceous Animals, which appeared in 1804, was his last work of importance. He died of the small-pox, October 6th, 1825, and his funeral was attended by several peers of France, members of the Institute, &c.

DELACERA'TION, *n. s.* From Lat. *delacero.* A tearing in pieces.

DELACRYMA'TION, *n. s.* Lat. *delacrymatio.* A falling down of the humors; the waterishness of the eyes, or a weeping much.

DELACTA'TION, *n. s.* Lat. *delactatio.* A weaning from the breast.

DELAMERE FOREST, a forest of England, in Cheshire, north of Chester, near the Weever; abounding with wood on its hills, fine pasture in its valleys, and fish in its waters.

DELANY (Patrick), a learned divine, and ingenious author, was born in Ireland about 1686. He received his education at Trinity College, Dublin, which he entered in the character of a sizer, and afterwards became a fellow. Under the patronage of lord Carteret he obtained preferment in the church; and in 1732 published in London a work entitled Revelation Examined with Candor. In 1738 he published his Reflections upon Polygamy; and, not long after, the Life of David, King of Israel, a work displaying much ingenuity and labour. In 1743 he married a second wife, the widow of a Cornish gentleman, and the following year obtained the deanery of Downe. In 1754 he published Observations on Lord Orrery's Remarks on the Life and Writings of Swift, in which there are many curious anecdotes of the latter. Dr. Delany continued writing for the public till a short time before his death; and his Sermons on Social Duties are still in estimation. He died at Bath in 1768.

DELA'PSED, *adj.* Lat. *delapsus*, with physicians. Bearing or falling down. It is used in speaking of the womb, and the like.

DELATE,' *v. a.* } Lat. *delatus*, *defero*. To
DELA'TION, *n. s.* } carry, convey, or spread.
DELA'TOR, *n. s.* } Applied both literally, and to the carrying intelligence, or an accusation. A delator is an accuser; an informer.

Try exactly the time wherein sound is *delated*. *Bacon.*

In *delation* of sounds, the inclosure of them preserveth them, and causeth them to be heard further. *Id.*

It is certain that the *delation* of light is in an instant. *Id.*

No sooner was that small colony, wherewith the depopulated earth was to be replanted, come forth of the ark, but we meet with Cham, a *delator* to his own father, inviting his brethren to that execrable spectacle of their parent's nakedness. *Government of the Tongue.*

What were these harpies but flatterers, *delators*, and inexpleably covetous? *Sandys's Travels.*

DELATIN, a market town of Austrian Gallicia, in the circle of Stanislawow. Near this town are extensive quarries of alum slate. It is twenty-four miles from Stanislawow.

DELAVAL (Edward Hussey), a chemist and natural philosopher, F.R.S. of London and Gottingen, was a brother of lord Delaval, and died at his house in Parliament-place, Westminster, August 14th, 1814, aged eighty-five. He particularly directed his studies to the chemistry of optics, on which he published many excellent papers in the Philosophical Transactions. He was the author of An Experimental Enquiry into the Cause of the Changes of Colors in Opaque and Colored Bodies, with an Historical Preface relative to the Parts of Philosophy therein examined, and to the several Arts and Manufactures dependent on them, 1777, 4to.; a work which was translated into French and Italian.

DELAWAR, a town of Virginia, in King William's county, situated on the peninsula formed by the confluence of the Pamunky and Mattapony. Twenty miles north by west of Williamsburg.

DELAWARE, one of the United States of North America, situated between 38° 29′ 30″, and 39° 54′ N. lat., and between 75° and 75° 48′

W. long. being in length ninety miles, and in breadth twenty-five, contains 1700 square miles, or 1,088,000 acres. It is bounded on the north by Pennsylvania, on the south and west by Maryland, and on the east by Delaware Bay and the Atlantic Ocean. It is divided into three counties, Newcastle, Kent, and Sussex; of which the chief towns are Wilmington, Dover, and Georgetown. The state of Delaware, the upper parts of the county of Newcastle excepted, is generally low and level. Large quantities of stagnant water, at particular seasons of the year, overspreading a great portion of the land, render it equally unfit for the purposes of agriculture, and injurious to health. The spine, or highest ridge of the peninsula, runs through the state of Delaware, inclining to the eastern, or Delaware side. In Sussex, Kent, and part of the county of Newcastle, there is a remarkable chain of swamps, from which the waters descend on each side, passing on the east to the Delaware, and on the west to the Chesapeake. Many of the shrubs and plants, growing in these swamps, are similar to those found on the highest mountains. Delaware is chiefly an agricultural state. It includes a very fertile tract of country; and scarcely any part of the United States is better adapted to the different purposes of agriculture, or in which a greater variety of the most useful productions can be conveniently and plentifully reared. The soil along the Delaware River, and from eight to ten miles into the interior country, is generally a rich clay, producing large timber. From thence to the swamps above-mentioned, the soil is light, sandy, and of an inferior quality. The surface of the country is very favorable for cultivation. The heights of Christiana are lofty and commanding; some of the hills of Brandywine are rough and stony; but descending from these, and a few others, the lower country is so little diversified as almost to form one extended plain. In the county of Newcastle the soil consists of a strong clay; in Kent there is a considerable mixture of sand; and in Sussex the quantity of sand altogether predominates. Wheat is the staple of this state. It grows here in such perfection, as not only to be particularly sought by the manufacturers of flour throughout the Union, but also to be distinguished and preferred, for its superior qualities, in foreign markets. It possesses an uncommon softness and whiteness, very favorable to the manufacturers of superfine flour, and in other respects far exceeds the hard and flinty grains raised in general on the higher lands. This state also produces plentiful crops of Indian corn, barley, rye, oats, flax, buck-wheat, and potatoes. It abounds too in natural and artificial meadows. Hemp, cotton, and silk, if properly attended to, thrive well.

The county of Essex exports very large quantities of lumber, obtained from a swamp, called the Indian River, or Cypress Swamp, lying partly within this state, and partly in the state of Maryland. This morass extends six miles from east to west, and nearly twelve from north to south, including an area of nearly 50,000 acres of land. The whole is a high and level basin, very wet, though undoubtedly the highest land between the sea and the bay, whence the Pokomoke descends on the one side, and Indian River and St. Martin's on the other. It contains a great variety of plants, trees, wild beasts, birds, and reptiles.

Few minerals are found in this state, except iron; but large quantities of bog iron ore, fit for casting, are obtained in Sussex county, among the branches of Nanticoke River.

The coast of this state is indented with a large number of creeks, or small rivers, which generally have a short course, soft banks, and numerous shoals; and are skirted with very extensive marshes. In the southern and western parts spring the head waters of Pocomoke, Wicomico, Nanticoke, Choptank, Chester, Sassafras, and Bohemia rivers, all falling into the Chesapeake; some of them are navigable twenty or thirty miles into the country, for vessels of fifty or sixty tons.

In the beginning of the seventeenth century, the Dutch, under the pretended purchase made by Henry Hudson, took possession of the lands on both sides the river Delaware, and as early as 1623 built a fort at a place since called Gloucester. In 1627, by the influence of William Useling, a respectable merchant in Sweden, a colony of Swedes and Finns came over, furnished with all the necessaries for beginning a new settlement, and landed at Cape Henlopen; at which time the Dutch had wholly quitted the country. The latter however returned in 1630, and built a fort at Lewistown, called by them Hoarkill. The year following, the Swedes built a fort near Wilmington, which they called Christian, or Christiana. Here also they laid out a small town, which was afterwards demolished by the Dutch. The same year they erected a fort higher up the river, upon Tenecum Island, which they called New Gottenburgh, and about the same time built forts at Chester, Elsingburgh, and other places. In 1655 the Dutch, under the command of Peter Stuyvesant, arrived in Delaware River, from New York, then called New Amsterdam, in seven vessels, with 600 or 700 men. They dispossessed the Swedes of their forts on the river, and sent the officers and principal inhabitants prisoners to Holland. The rest submitted to the conquerors, and remained in the country. On the 1st of October, 1664, Sir Robert Carr obtained the submission of the Swedes on the Delaware. Four years after, colonel Nicholls, governor of New York, with his council, on the 21st of April, appointed six persons to assist captain Carr in the government of the country. In 1672 the town of Newcastle was incorporated by the state of New York, to be governed by a bailiff and six assistants. They were to have a free trade, without being obliged to make entry at New York, as had formerly been the practice. Wampum was at this time the principal currency of the country. In 1674 Charles II., by a second patent, dated 29th of June, granted to his brother, the duke of York, all that country called by the Dutch New Netherlands, of which the three counties of Newcastle, Kent, and Sussex were a part. In 1683 the duke of York sold to William Penn the town of Newcastle, with the whole of the

territory which, till the revolution, was called the Three Lower Counties. These three counties were considered as a part of Pennsylvania in matters of government. The same governor presided over both: but the assembly and courts of judicature were different, as to their constituent members, though in form nearly the same. At the revolution they became a distinct territory, called the Delaware State. See AMERICA, NORTH.

The population of the three counties of Delaware, subdivided into hundreds, was thus returned, under the last census:—

1. NEWCASTLE COUNTY.

	Population in 1820.
Brandywine hundred	2796
Borough of Wilmington	5268
Christiana hundred	3087
Newcastle hundred	2671
Mill Creek hundred	3046
White Clay Creek hundred	1904
Red Lion hundred	929
Pencader hundred	1876
St. George's hundred	2934
Appoquinimink hundred	3388
Total of Newcastle county	27,899

II. KENT COUNTY.

	Population in 1820.
Duck Creek hundred	3951
St. Jones hundred	1590
Little Creek hundred	1963
Murderhill hundred	7558
Mispillion hundred	5731
Tota. of Kent county	20,793

III. SUSSEX COUNTY.

Cedar Creek hundred	2280
Broad Kiln hundred	2731
Lewes and Rehoboth hundred	1657
Indian River hundred	1887
Nanticoke hundred	2335
North-west Fork hundred	3456
Baltimore hundred	2057
Dagsborough hundred	2204
Broad Creek hundred	2599
Little Creek hundred	2851
Total of Sussex county	24,057
Grand total	72,749

The following table shows the population of Delaware, at each of the four national enumerations:—

	1790.	1800.	1810.	1820.	Increase in 30 years.	Rate of Increase.
Whites	46,308	49,852	55,361	55,282	8,974	19 per cent.
Slaves	8,887	6,143	4,177	4,509		
Free blacks	3,899	8,278	13,136	12,958	9,059	232 per cent.
Total	59,094	64,273	72,674	72,749	13,645	23 per cent.

DELAWARE, a river of the United States, which rises at two principal heads in the state of New York. It runs towards the south, and in its course forms the boundary line between Pennsylvania, New York, and Jersey; a few miles below Philadelphia it separates the state of Delaware from Jersey, and afterwards loses itself in Delaware Bay. The bay and river are navigable for 155 miles from the sea, up to the great or lower falls at Trenton. A seventy-four gun ship may ascend to Philadelphia; and sloops thirty-five miles further.

DELAWARE BAY, a large bay or arm of the sea, between the Delaware and New Jersey states, and formed by the mouth of the Delaware river, and several other small ones. The bay is about sixty miles long, and thirty miles across in the centre. It opens into the Atlantic north-west and south-east, between Cape Henlopen on the right and Cape May on the left, and its mouth is twenty-one miles broad.

DELAWARE COUNTY, in Pennsylvania, is south-west of Philadelphia county, on Delaware River. It is about twenty-one miles in length, and fifteen in breadth, containing 115,200 acres, and subdivided into nineteen townships; the chief of which is Chester. The number of inhabitants is 9,483. The lands bordering on the Delaware are low, and afford excellent meadows and pasturage; and are guarded from inundations by mounds of earth or dykes. Great numbers of cattle are brought here from the western parts of Virginia and North Carolina, to be fattened for supplying the Philadelphia market.

DELAWARE COUNTY, a county in the state of New York, on the head waters of Delaware River, taken from Otsego county. It is bounded on the north by Otsego county, east by Schoharie and Green counties, south by Ulster and Sullivan counties, and west by the state of Pennsylvania, by Broome county, and a small part of Chenango county. Its greatest length is fifty-four miles, its greatest breadth thirty-five; the area 1425 square miles, or 912,000 acres; between 41° 51′ and 42° 1′ north lat. It is of a broken and diversified surface, containing rugged and lofty mountains, with low plains and rich valleys. It sends two members to the house of assembly.

DELAWARES, a nation of North American Indians, formerly numerous and powerful, and who possessed part of Pennsylvania, New Jersey, and New York. This name was given them by the Europeans; for they call themselves Lennilenape, that is, Indian men; or Woapanachky which signifies a people living towards the rising sun. They are now, however, much reduced in number.

DELAY', *v. a.*, *v. n* & *n. s.* } Fr. *delayer*; Span. and Port. *dilatár*; Ital. *dilatare*; Lat. *delatio, differre*, from *de* and *fero*, to put off. To procrastinate; defer; and hence to hinder, frustrate, as well as allay; temper; qualify: as a neuter verb, to stop; cease from action. As a substantive, inactivity; stoppage; stay. A delayer is an habitual procrastinator.

DELAY'ER. *n. s.* }

And when the people saw that Moses *delayed* to come down out of the mount, the people gathered themselves together unto Aaron. *Exod.* xxxii. 1.

I have learned that fearful commenting
Is leaden servitor to dull *delay*;
Delay leads impotent and snail-paced beggary.
Shakspeare. Richard III.

That misery which must be is mitigated with speed, and aggravated with *delay*.
Bp. Hall. Contemplations.

Delayed thankfulness is not worthy of acceptation.
Id.

Thyrsis, whose artful strains have oft *delayed*
The huddling brook to hear his madrigal. *Milton.*

She flies the town, and mixing with the throng
Of madding matrons, bears the bride along:
Wandering through woods and wilds, and devious ways,
And with these arts the Trojan match *delays*.
Dryden.

Cyrus he found, on him his force essayed;
For Hector was to the tenth year *delayed*. *Id.*

There seem to be certain bounds to the quickness and slowness of the succession of those ideas one to another in our minds, beyond which they can neither *delay* nor hasten. *Locke.*

Sullen and a *delayer* of Justice.
Swift. Char. of Henry VII.

Be mindful goddess, of thy promise made!
Must sad Ulysses ever be *delayed*? *Pope.*

At thirty man suspects himself a fool;
Knows it at forty and reforms his plan;
At fifty chides his infamous *delay*;
—In all the magnanimity of thought
Resolves, and re-resolves, then dies the same.
Young.

DELECT'ABLE, *adj.* }
DELECT'ABLENESS, *n. s.* }
DELECT'ABLY, *adv.* }
DELECTA'TION, *n. s.* } Fr. Span. and Portug. *delectable*; Ital. *dilettabile*; Lat. *delectabilis*; from *delecto*, (*de* and *lacto*, to suckle) to delight. Delightful; pleasing; state of being pleasing or delightful.

Out break the tears for joy and *delectation*.
Sir T. More.

Evening now approached:
For we have also our evening and our morn:
We ours for change *delectable*, not need. *Milton.*

He brought thee into this delicious grove,
This garden planted with the trees of God;
Delectable both to behold and taste. *Id.*

Some of his attributes, and the manifestations thereof, are not only highly *delectable* to the intellective faculty, but are suitably and easily conceptible by us, because apparent in his works; as his goodness, beneficence, wisdom, and power. *Hale.*

The apple's outward form,
Delectable, the witless swain beguiles;
Till that with writhen mouth, and spattering noise,
He tastes the bitter morsel. *Philips.*

DEL'EGATE, *v. a.*, *n. s.* & *adj.* } Span. and Portug. *delegar*; Fr. *deleguer*; Lat. *deligo*; *de* and *lego*; Gr. λεγω; Heb. לקח; to choose. To appoint another one's representative; to entrust with power. A delegate is the party so commissioned; a vicar. The court of delegates is defined by Ayliffe as a court wherein all causes of appeal, by way of devolution from either of the archbishops, are decided.

DELEGA'TION. }

If after her
Any shall live, which dare true good prefer,
Every such person is her *delegate*,
To' accomplish that which should have been her fate.
Donne.

As God hath imprinted his authority in several parts upon several estates of men, as princes, parents, spiritual guides; so he hath also *delegated* and committed part of his care and providence unto them.
Taylor.

Princes in judgment, and their *delegate* judges, must judge the causes of all persons uprightly and impartially. *Id.*

When bishops divided parishes, and fixt the presbyters upon a cure, so many parishes as they distinguished, so many *delegations* they made.
Bp. Taylor.

Why does he wake the correspondent moon
And fill her willing lamp with liquid light;
Commanding her, with *delegated* powers,
To beautify the world, and bless the night?
Prior.

Let the young Austrian then her terrours bear,
Great as he is, her *delegate* in war. *Id.*

Elect by Jove, his *delegate* of sway,
With joyous pride the summons I'd obey.
Pope.

As God is the universal monarch, so we have all the relation of fellow-subjects to him; and can pretend no farther jurisdiction over each other, than what he has *delegated* to us. *Decay of Piety.*

The goddess ceased,—the *delegated* throng,
O'er the wide plains delighted rush along;
In dusky squadrons, and in shining groups,
Hosts follow hosts, and troops succeed to troops.
Darwin.

DELEGATES, COURT OF, is the great court of appeal in all ecclesiastical causes. These delegates are appointed by the king's commission under his great seal, and issuing out of chancery, to represent his royal person, and hear all appeals to him made by virtue of the statute 25 Henry VIII. cap. 19. The commission is usually filled with lords, spiritual and temporal, judges of the courts at Westminster, and doctors of the civil law.

DELENI'FICAL, *adj.* Lat. *delenificus*. Having virtue to assuage or ease pain.

DELE'TE, *v. a.* }
DELETE'RIOUS, *adj.* }
DEL'ETERY, }
DELE'TION, *n. s.* } Lat. *deletus*, from *deleo*, *de*, privative, and *lino*, to paint. To blot out; to obliterate: deleterious and deletery signify, destructive; poisonous; deletion is razing out or destroying.

Many things, neither *deleterious* by substance or quality, are yet destructive by figure, or some occasional activity. *Browne.*

Indeed, if there be a total *deletion* of every person of the opposing party or country, then the victory is complete, because none remains to call it in question. *Hale.*

Composed of two *deleterious* materials, chlorine and sodium, the united substance is more beneficial and salubrious, than it is in the power of our limited understanding to comprehend. *Sir T. Bernard.*

Nor doctor epidemick,
Though stored with *deletery* medicines,
Which whosoever took is dead since,
E'er sent so vast a colony
To both the under worlds as he. *Hudibras.*

'Tis pity wine should be so *deleterious*,
For tea and coffee leave us much more serious.
Byron.

DELF, *n. s.* } From Sax. delpan, to dig. A
DELFE. } mine; a quarry; a pit dug. Also a particular kind of earthenware. See below.

Yet could not such mines, without great pains and charges, if at all, be wrought: the *delfs* would be so flown with waters, that no gins or machines could suffice to lay and keep them dry. *Ray.*

DELFT WARE is a kind of pottery of a baked earth, covered with an enamel or white glazing, which gives it the appearance and neatness of porcelain. Some kinds of it differ much from others, either in sustaining sudden heat without breaking, or in the beauty and regularity of their forms, of their enamel, and of the painting with which they are ornamented. In general, the fine and beautiful enamelled potteries, which approach the nearest to porcelain in external appearance, are least able to resist a brisk fire. Those which best sustain a sudden heat are coarse, and resemble common pottery. The basis of this pottery is clay, which is to be mixed, when too fat, with such a quantity of sand, that the earth shall preserve enough of its ductility to be worked, moulded, and turned easily: and yet that its fatness shall be sufficiently taken from it, that it may not crack or shrink too much in drying or in baking. Vessels formed of this earth must be dried very gently to avoid cracking. They are then to be placed in a furnace to receive a slight baking, which is only meant to give them a certain consistence of hardness. And, lastly, they are to be covered with an enamel or glazing; which is done by putting upon the vessels thus prepared, the enamel, which has been ground very fine, and diluted with water. As vessels on which the enamel is applied are but slightly baked, they readily imbibe the water in which the enamel is suspended, and a layer of this enamel adheres to their surface: these vessels may then be painted with colors composed of metallic calces, mixed and ground with a fusible glass. When they are become perfectly dry, they are to be placed in the furnace, included in cases of baked earth called seggars, and exposed to a heat capable of fusing uniformly the enamel which covers them. This heat, given to fuse the enamel, being much stronger than that which was applied at first to give some consistence to the ware, is also the heat necessary to complete the baking of it. The furnace, and the colors used for painting this ware, are the same as those employed for porcelain, which, in Holland, was once exclusively famous for delft ware, but its sale has lately been greatly rivalled by the potteries of England and Germany.

DELFT, a fine old town of South Holland, once the capital of Delftland, is situated on a canal called the Shie, which, after traversing the city, joins the Meuse at Schiedam and Delftshaven. Its figure is a parallelogram, about two miles in circuit; the streets are clean, neat, and well built, having many handsome houses and magnificent edifices, particularly the stadt-house. The city holds a third rank in the country; its magistracy is composed of four burgo-masters, and seven eschevins, jointly with the vroedschap or common council, who name the escout for three years, and continue him if they judge proper. It has an arsenal generally well furnished; and the country around it is agreeable, but so low, that, if great care were not taken to keep the dykes and sluices in good repair, it would soon be overwhelmed. The building of this city was begun in 1075, by Godfrey le Bossu, after he had conquered Holland; since which it has often experienced the calamities of war, as well as those of fire. In the fourteenth century, Albert de Bavaria, count of Holland, took it after a siege of six weeks, dismantled and ruined the castle, and obliged the city to pay 10,000 crowns. In 1536, it was reduced to ashes by a dreadful fire, during which a stork, not being able to save her young, was observed to precipitate herself into the flames. The city was soon after rebuilt with greater magnificence; but in 1654 it was again greatly damaged by fire, which destroyed a magazine of gun-powder, and above 500 houses; since which the powder-magazine is built at some distance from the town. Before the Reformation, Delft had ten religious houses, besides hospitals and chapels. In one of the present churches is the tomb of William I. prince of Orange, who was assassinated in a house near, which is still standing; and in another that of admiral Tromp. The celebrated Hugo Grotius was a native of this place. The Doelen inn was the scene of many of the councils and preparations of the Dutch patriots in their struggles against Spain. Delft was formerly much celebrated for beer, of which it exported large quantities; and also for a peculiar kind of glazed earthenware, called delft ware. Here are now made several kinds of fine cloth, and carpets. Butter and tobacco pipes also are made here in considerable quantities. It is nine miles north-west of Rotterdam, and thirty south-west of Amsterdam.

DELHI, or DELLI, an extensive province of Hindostan, bound on the north by Lahore, and several districts in Northern Hindostan, as Besseer, Dewarcote, and Serinagur; to the south by Agra and Ajmeer; to the east it has Oude, and various ridges of high hills, which separate it from Northern Hindostan; and to the west Ajmeer and Lahore. In length it may be estimated at 240 miles, by 180 the average breadth. The greater part of this province is in the most wretched state of barrenness, having been the seat of continued war for many years; and being naturally very sterile, though formerly well planted

with mangoe trees, scarcely one is now to be seen. The Cauggar River overflows part of the Hurrianch, during the rainy season, after which the pasturage is excellent, and the country tolerably healthy until the desert to the west becomes heated; and, between the Jumna and Sattulege, the soil produces wheat, barley, gram, and other grains; but it is but little cultivated. Irrigation is necessary to insure any crop, and water is found at ten or twelve cubits from the surface of the earth; yet wells are seen only near towns and villages. This province is, at present, occupied in the following manner. The whole district to the east of the Jumna and round the city of Delhi, with a considerable portion of the north-eastern quarter, are possessed by the British, and governed by a regular civil establishment. The south-west is occupied by the Machery rajah of Alvar, the rajah of Bhurtpoor, and other native chiefs, who are in alliance with, or under the influence of the British. The country to the north-west of the Jumna and south of the Suttulege is occupied by a number of petty Seik chiefs, and other native princes, in dependence on the British, who form a barrier to their territories in this quarter. The western frontier has a natural protection, from the immense extent of desert and sterile territory by which it is bounded.

Except in the country possessed by the British, the inhabitants still continue to carry on internal warfare; to which they have been so long accustomed, that they are extremely expert in the use of arms, particularly the lance, sabre, and matchlock. The principal towns are Delhi, Sirhind, Saharunpore, Buriely, Anoopsheher, Merat, Hissar, Seerdhuna, Patteealah, and Budavoon.

Delhi, a celebrated city, for many years the capital of the foregoing province of Hindostan, is situated on the banks of the Jumna; and during the era of its prosperity, is said to have covered a space of twenty miles in length. Its ancient name was Indraput, or Inderprest. It was taken by the Mahommedans in the year 1193, under Cuttubaddeen Khan, who fixed his residence here, and made it his capital. Several succeeding emperors increased and improved it till the beginning of the sixteenth century, when the Afghan monarch, Sekunder Lody, made Agra the seat of empire, and Delhi was neglected until the return of Homayon from Persia in the year 1554, when he rebuilt the old fort of Inderprest, and named it Deenpunnah, or the asylum of religion. During the reigns of Akbar and Jehangire, Delhi was again deserted; but the emperor Shan Jehan restored it to its former splendor, and expended immense sums of money on the present fortress, the cathedral, mosque, &c. Superb palaces, mosques, and colleges, in different parts of the city, were raised by his court and followers. The walls which environ the town were put into repair, and its seven gates erected or beautified. Its noble gardens were also now laid out, and the tombs of the saints and deceased sovereigns thoroughly repaired. The canal was lengthened and deepened, and Delhi was rendered the glory of Hindostan. One garden alone is said to have cost a million sterling. The modern city, apportioned into thirty-six divisions, each named after some ancient noble family, contains many good brick houses. The streets are narrow, with the exception of two; the first leading from the palace to the Delhi Gate, which is broad and spacious, and had formerly an aqueduct along its whole extent; the second from the palace to the Lahore Gate. The bazaars appear in a dilapidated state; but in the Chandeny Choke, or Silver Square, is a number of well-furnished shops. The population has considerably increased under the British management, and every species of property is yearly rising in value. The English resident and other gentlemen live in the town, while the troops have a distinct cantonment. Precious stones of a good quality are to be had at Delhi, particularly the large red and black cornelian and peerozas; beedree hookah bottoms are also manufactured here. The cultivation in the neighbourhood is principally on the banks of the Jumna, where corn, rice, millet, and indigo, are raised. It stands in long. 77° 19′ E., lat. 28° 43′ N.

DELIA, in antiquity, a festival celebrated every fifth year in the island of Delos, in honor of Apollo. It was first instituted by Theseus; who, at his return from Crete, placed a statue there, which he had received from Ariadne. At the celebration they crowned the statue of the goddess with garlands, appointed a choir of music, and exhibited horse-races. They afterwards led a dance, in which they imitated, by their motions, the various windings of the Cretan labyrinth, from which Theseus had extricated himself by Ariadne's assistance.—There was another festival of the same name yearly celebrated by the Athenians in Delos. It also was instituted by Theseus, who, in going to Crete, made a vow, that he would yearly visit the temple of Delos. The persons employed in this annual procession were called Deliastæ and Theori. The ship, the same which carried Theseus, and had been carefully preserved by the Athenians, was called Theoria and Delias. When the ship was ready for the voyage, the priest of Apollo solemnly adorned the stern with garlands, and a universal lustration was made all over the city. The Theori were crowned with laurels, and before them proceeded men armed with axes, in commemoration of Theseus, who had cleared the way from Trœzen to Athens, and delivered the country from robbers. When the ship arrived at Delos, they offered solemn sacrifices to the god of the island, and celebrated a festival to his honor. After this they retired to their ship and sailed back to Athens, where all the people of the city ran in crowds to meet them. Every appearance of festivity prevailed at their approach, and the citizens opened their doors and prostrated themselves before the Deliastæ as they walked in procession. During this festival it was unlawful to put to death any malefactor, and on that account the life of Socrates was prolonged for thirty days.

DELIACUS, among the ancients, denoted a poulterer, or a person who sold fowls, fatted capons, eggs, &c., because the people of Delos first practised this occupation. Cicero, in his Academic Questions, lib. iv., Pliny, lib. x. cap. 30, and Columella, lib. viii. cap. 8, mention the Deliaci.

DELIBATION, *n. s.* Lat. *delibatio.* An essay; a taste.

DELIB'ERATE, *v. a.* & *n.* } Fr. *deliberer;*
DELIB'ERATELY, *adv.* & *adj.* } Span. and Por.
DELIB'ERATENESS, *n. s.* } *deliberar;* Ital.
DELIB'ERATION, } and Lat. *delibe-*
DELIBERATIVE, } *rare;* from *de,*
DELIB'ERATIVENESS. } and *libra,* a balance. To weigh in mind; consider: as a neuter verb, says Minsheu, to think with a view to choose, or decide; to hesitate. Deliberate is circumspect; wary; advised.

Commonly it is for virtuous considerations, that wisdom so far prevaileth with men as to make them desirous of slow and *deliberate* death, against the stream of their sensual inclination. *Hooker.*

Echoes are some more sudden, and chop again as soon as the voice is delivered; others are more *deliberate,* that is, give more space between the voice and the echo, which is caused by the local nearness or distance. *Bacon.*

In *deliberatives,* the point is, what is evil; and, of good, what is greater; and of evil, what is less. *Id.*

Most Grave-belly was *deliberate,*
Not rash, like his accusers. *Shakspeare. Coriolanus.*

They would not stay the fair production of acts, in the order, gravity, and *deliberateness* befitting a parliament. *King Charles.*

How should we *deliberate* in our actions, which are so subject to imperfection! since it pleased thine infinite perfection, not out of need, to take leisure. *Bishop Hall. Contemplations.*

If mankind had no power to avoid ill or choose good by free deliberation, it should never be guilty of any thing that was done. *Hammond's Fundamentals.*

He judges to a hair of little indecencies; knows better than any man what is not to be written; and never hazards himself so far as to fall, but plods on *deliberately;* and, as a grave man ought, is sure to put his staff before him. *Dryden.*

When love once pleads admission to our heart,
In spite of all the virtue we can boast,
The woman that *deliberates* is lost. *Addison.*

Where men are the most sure and arrogant, they are commonly the most mistaken, and have there given reins to passion, without that proper *deliberation* and suspense, which can alone secure them from the grossest absurdities. *Hume.*

DELIBERANDI ANNUS, in the Scottish law, a year allowed to an heir, to deliberate whether he will enter as heir or not.

DELIBERATIVE VOICE, a right to give advice and to vote in an assembly. In councils, the bishops have deliberative voices; those beneath them have only consultative voices.

DEL'ICATE, *adj.* & *n. s.* } Fr. *delicat;* Span.
DEL'ICACY, *n. s.* } and Port. *delicado;*
DEL'ICATENESS, } Ital. *delicato;* Lat.
DEL'ICATELY, } *delicatus;* from *de-*
DELI'CES, *n. s.* & *pl.* } *liciæ,* delights. Agreeable to the taste, or the senses generally; nice; of small constituent parts; felicitous in construction; elegant: and, as agreeableness, 'sweet, attractive grace,' is peculiarly feminine: a delicate is an effeminate, though not an agreeable man; and expresses also inability to bear hardships. A delicate is used by the Tatler for a nice man:' but the plural substantive, delicates, expresses, like the old word delices, the same as delicacies, i. e. dainties, agreeable viands.

And kingis of the erthe and marchauntis of the erthe diden fornycacioun with hir, and thei ben maad riche of the vertue of *delices* of hir. *Wiclif. Apoc.* 18.

The *delicate* woman among you would not adventure to set the sole of her foot upon the ground, for *delicateness* and tenderness. *Deut.* xxviii. 56.

Yet was I late promised otherwyse,
This yere to liue in welth and *delice.*
Sir T. More.

And now he has poured out his idle mind
In dainty *delices* and lavish joys,
Having his warlike weapons cast behind,
And flowers in pleasures and vain pleasing toys.
Spenser.

Tender and *delicate* persons must needs be oft angry, they have so many things to trouble them, which more robust natures have little sense of. *Bacon.*

Witness this army, of such mass and charge,
Led by a *delicate* and tender prince. *Shakspeare.*

Where they most breed and haunt, I have observed,
The air is *delicate.* *Id.*

The shepherd's homely curds,
His cold thin drink out of his leather bottle,
All which secure and sweetly he enjoys,
Are far beyond a prince's *delicates.* *Id.*

These *delicacies*
I mean of taste, sight, smell, herbs, fruits, and flowers,
Walks, and the melody of birds. *Milton.*

Eat not *delicately,* or nicely; that is, be not troublesome to thyself or others in the choice of thy meats, or the *delicacy* of thy sauces. *Taylor.*

Persons born of families noble and rich, derive a weakness of constitution from the ease and luxury of their ancestors, and the *delicacy* of their own education. *Temple.*

A man of goodly presence, in whom strong making took not away *delicacy,* nor beauty fierceness. *Sidney.*

Van Dyck has even excelled him in the *delicacy* of his colouring, and in his cabinet pieces. *Dryden.*

That which will distinguish his style from all other poets, is the elegance of his words, and the numerousness of his verse: there is nothing so *delicately* turned in all the Roman language. *Id.*

They their appetites not only feed,
With *delicates* of leaves and marshy weed,
But with thy sickle reap the rankest land. *Id.*

Any zealous for promoting the interest of his country, must conquer all that tenderness and *delicacy,* which may make him afraid of being spoken ill of. *Addison.*

You may see into the spirits of them all, and form your pen from these general notions and *delicacy* of thought and happy words. *Felton.*

And such, I exclaimed, is the pitiless part
Some act by the *delicate* mind,
Regardless of wringing and breaking a heart
Already to sorrow resigned. *Cowper.*

But in his *delicate* form—a dream of Love,
Shaped by some solitary nymph, whose breast
Longed for a deathless lover from above,
And maddened in that vision! *Byron.*

DELI'CIOUS, *adj.* } Fr. *delicieux*; Lat.
DELI'CIOUSLY, *adv.* } *deliciæ*, delights. —
DELI'CIOUSNESS, *n. s.* } Sweet; agreeable; delicate; charming; grateful to the sense or mind.

How much she hath glorified herself, and lived *deliciously*, so much torment and sorrow give her. *Rev.* xviii. 7.

The sweetest honey
Is loathsome in its own *deliciousness*,
And in the taste confounds the appetite.
Shakspeare.

Let no man judge of himself, or of the blessings and efficacy of the sacrament itself, by any sensible relish, by the gust and *deliciousness*, which he sometimes perceives, and at other times does not perceive. *Taylor.*

And if some nice and likuorous appetite
Desired more daintie dish of rare delite,
They scaled the stored crab with clasped knee,
Till they had sated their *delicious* eie.
Bp. Hall. Satires iii. 1.

It is highly probable, that upon Adam's disobedience Almighty God chased him out of Paradise, the fairest and most *delicious* part of the earth, into some other the most barren and unpleasant. *Woodward.*

Still on that breast enamoured let me lie,
Still drink *delicious* poison from thy eye. *Pope.*

But since, to make use of your own allusion, the cherries began now to crowd the market, and their season was almost over, we consulted our future enjoyments, and endeavoured to make the exquisite pleasure that *delicious* fruit gave our taste as lasting as we could. *Spectator.*

In his last hours his easy wit display:
Like the rich fruit he sings, *delicious* in decay.
Smith.

DELIGHT', *v. a*, *v. n.* & *n. s.* } Fr. *delecter*; Span. and Port. *deleytar*; It. *dilettare*, from Lat. *delectare*, *deligo*. See DELEGATE. To please in a high degree; to have pleasure, followed by *in*. Delightsome and delightful are synonymous, as are delightsomely and delightfully. Delight is either the satisfaction and pleasure felt or the object that affords them.
DELIGHT'FUL, *adj.*
DELIGHT'FULLY, *adv.*
DELIGHT'FULNESS, *n. s.*
DELIGHT'SOME,
DELIGHT'SOMELY,
DELIGHT'SOMENESS.

Doth my lord, the king, *delight* in this thing?
2 *Sam.* xxiv.

Blessed is the man that feareth the Lord, that *delighteth* greatly in his commandments. *Psalm* cxii. 1.

For I *delyte* togidre to the law of God aftir the ynner man, but I see a nother law in my membris aghen fightynge the law of my soule. *Wiclif. Romayns* 7.

To liven in *delit* was ever his wone,
For he was Epicures owen sone
That held opinion that plein *delits*
Was verailly felicite parfite.
Chaucer. Prol. to Cant. Tales.

And though he lyste to see his ladyes grace full sore,
Such pleasures as *delyght* his eye, do not his helthe restore. *Surrey.*

The words themselves being so ancient, the knitting of them so short and intricate, and the whole periods and compass of his speech so *delightsome* for the roundness, and so grave for the strangeness. *Spenser.*

To thee, that art the somner's nightingale,
The soueraine goddesses most deare *delight*,
Why do I send this rustic madrigale,
That may thy tunefull care unseason quite.
Id. Faerie Queene.

Come, sisters, cheer we up his sprights,
And shew the best of our *delights*:
We'll charm the air to give a sound,
While you perform your antic round.
Shakspeare.

O voice! once heard
Delightfully, increase and multiply;
Now death to hear. *Milton.*

If happiness had consisted in doing nothing, man had not been employed; all his *delights* could not have made him happy in an idle life.
Bp. Hall. Contemplations.

The princes *delighting* their conceits with confirming their knowledge, seeing wherein the sea-discipline differed from the land service, had pleasing entertainment. *Sidney.*

This indeed shews the excellency of the object, but doth not altogether take away the *delightfulness* of the knowledge. *Tillotson.*

She was his care, his hope, and his *delight*,
Most in his thought, and ever in his sight.
Dryden.

Poor insects, whereof some are bees, *delighted* with flowers, and their sweetness; others beetles, *delighted* with other kinds of viands. *Locke.*

He heard, he took, and pouring down his throat,
Delighted, swilled the large luxurious draught.
Pope.

No spring, nor summer, on the mountain seen,
Smiles with gay fruits or with *delightful* green.
Addison.

God has furnished every one with the same means of exchanging hunger and thirst for *delightsome* vigour
Grew

We love
The king, who loves the law, respects his bounds,
And reigns content within them: him we serve
Freely and with *delight*, who leaves us free.
Cowper's Task.

But you will say, it is reasonable to conclude that as all your predecessors, in this vale of misery and horror, have found themselves *delightfully* disappointed at last, so will you. *Id. Private Correspondence.*

When the soft lute in sweet impassioned strains,
Of cruel nymphs or broken vows complains,
As on the breeze the fine vibration floats,
We drink *delighted* the melodious notes. *Darwin.*

Yes, woman, yes! Though in his pompous school
Man proud may learn to think and talk by rule,
There is the native eloquence, whose grace
Flows true to every hour and every place—
That with a swain familiar can recal
Scenes, persons, things, and spread *delight* on all.
Dr. T. Brown.

DELIMA, in botany, a genus of the monogynia order, and polyandria class of plants: COR. none: CAL. five-leaved with a two-seeded berry. Species one only, a native of South America.

DELIN'EATE, *v. a.* } Lat. *delineo*; of *de*,
DELINEA'TION, *n. s.* } and *linea*, a line; to
DELIN'EAMENT, *n. s.* } make lines. To sketch, or make an outline; hence to paint, and to describe: delineation and delineament both express the painting or drawing made; the representation.

The sun 's a type of that eternal light
Which we call God, a fair *delineament*.
More's Song of the Soul.

It followeth, to *delineate* the region in which God first planted his delightful garden. *Raleigh.*

The licentia pictoria is very large: with the same reason they may *delineate* old Nestor like Adonis, Hecuba with Helen's face, and Time with Absalom's head. *Browne.*

I have not here time to *delineate* to you the glories of God's heavenly kingdom; nor, indeed, could I tell you, if I had, what the happiness of that place and portion is. *Wake.*

In the orthographical schemes, there should be a true *delineation*, and the just dimensions.
Mortimer.

DELIN'QUENT, *n. s.* } Fr. *delinquent*; Span.
DELIN'QUENCY. } and Port. *delinquento*; Lat. *delinquens*, from *de*, and *linquo* to leave one's duty. One criminally neglectful of duty: neglect; failure of duty.

All ruined, not by war, or any other disaster, but by justice and sentence, as *delinquents* and criminals. *Bacon.*

he next news we heard was, the House of Commons had drawn up a bill against us, wherein they declared us to be *delinquents* of a very high nature.
Bp. Hall's Hard Measure.

Such an envious state,
That sooner will accuse the magistrate
Than the *delinquent*; and will rather grieve
The treason is not acted, than believe.
Ben Jonson.

They never punish the greatest and most intolerable *delinquency* of the tumults, and their exciters.
King Charles.

He had, upon frivolous surmises, been sent for as a *delinquent*, and been brought upon his knees.
Dryden.

Can
Thy years determine like the age of man,
That thou should'st my *delinquencies* enquire,
And with variety of tortures tire?
Sandy's Paraphrase of Job.

A delinquent ought to be cited in the place or jurisdiction where the *delinquency* was committed by him.
Ayliffe.

Does law, so jealous in the cause of man,
Denounce no doom on the *delinquent*? None.
Cowper's Task.

DELIQ'UATE, *v. n.* & *a.* } Lat. *deliquo*; from
DELIQUA'TION, *n. s.* } *de* and *liquo* (*lix*,
DELIQUIUM, *n. s.* } liquid) to melt. As a verb active, to dissolve into liquid: deligation and deliquium both signify a dissolving chemically; and hence fainting or swooning.

It will be resolved into a liquor very analogous to that which the chymists make of salt of tartar, left in moist cellars to *deliquate*. *Boyle.*

Their conscience was not stark dead, but under a kind of spiritual *deliquium*. *Leath.*

When salt of tartar flows per *deliquium*, it is visible that the particles of water are moved towards the particles of salt. *Bp. Berkeley.*

Such an ebullition as we see made by the mixture of some chymical liquors, as oil of vitriol and *deliquated* salt of tarter. *Cudworth.*

DELIQUESCENCE, in chemistry, the property which certain bodies have of attracting moisture from the air, and thereby becoming liquid. This property is never found but in saline substances, or matters containing them. It is caused by the great affinity which these substances have with water. The more simple they are, according to Mr. Macquer, the more they incline to deliquescence. Hence, acids, and certain alkalis, which are the most simple, are also the most deliquescent salts. Many neutral salts are deliquescent, chiefly those whose bases are not saline substances. Though the immediate cause of deliquescence is the attraction of the moisture of the air, yet it remains to be discovered, why some salts attract this moisture powerfully, and others, though seemingly equally simple, do not attract it. The vegetable alkali, for instance, attracts moisture powerfully; the mineral alkali, though to appearance equally simple, does not attract it at all. The acid of tartar by itself does not attract the moisture of the air; but if mixed with borax, which has a little attraction for moisture the mixture is extremely deliquescent. See CHEMISTRY.

DELI'RATE, *v. n.* } Lat. *deliro* (from
DELIRA'TION, *n. s.* } *de*, and *lira* a ridge
DELI'RAMENT, } or furrow); to be
DELI'RIOUS, *adj.* } mad, because a mad
DELI'RIOUSNESS, *n. s.* } person passes the
DELI'RIUM. } bounds of reason.—Ainsworth. To dote; talk wildly or idly: deliration is the same with delirium, and the latter a more common word, signifying alienation of mind; a state of dotage: delirious is light-headed; partaking of delirium.

The people about him said he had been for some hours *delirious*; but when I saw him he had his understanding as well as ever I knew. *Swift.*

On bed
Delirious flung, sleep from his pillow flies.
Thomson.

Too great alacrity and promptness in answering, especially in persons naturally of another temper, is a sign of an approaching *delirium*; and in a feverish *delirium* there is a small inflammation of the brain.
Arbuthnot on Diet.

On the 6th, he was all day *delirious*, which he mentioned four days afterwards as a sufficient humiliation of the vanity of man. At the intermission of his *deliriousness*, he was always saying something kind either of his present or his absent friends.
Johnson's Life of Pope.

How profound
The gulf! and how the giant element
From rock to rock leaps with *delirious* bound,
Crushing the cliffs, which, downward worn and rent
With his fierce footsteps, yield in chasms a fearful vent.
Byron.

DELIRIUM. When the ideas excited in the mind do not correspond to the external objects, but are produced by the change induced on the common sensorium, the patient is said to be in a delirium. See MEDICINE.

DELITIGATION, *n. s.* Lat. *delitigo*; *de* and *litigo* (*lites ago*, to raise strife), to quarrel. A striving or contending. See LITIGATION.

DELI'VER, *v. a.* & *n.* } Fr. *delivrér*; Span.
DELI'VERANCE, *n. s.* } *librár*; Ital. *liberáre*;
DELI'VERER, } from Lat. *libero* (*à*
DELI'VERY. } *liber*, free). To make or set free; to disburden; to rescue; to give up: hence to offer; present; exert one's self; utter by speech: delivering *over* and delivering *up* are only forms of delivering, and mean resigning

to. Deliverance and delivery are the act of delivering; utterance; activity; and the latter has a particular application to childbirth.

Thanne he *delyverede* to hem Barabas, but he took to hem Jhesus, scourgid to be crucified.
Wiclif. Matt. xxvii.

Thou shalt *deliver* Pharaoh's cup into his hand, after the former manner, when thou wast his butler.
Gen. xl. 13.

Deliver me not *over* unto the will of mine enemies; for false witnesses are risen up against me, and such as breathe out cruelty. *Psalm* xxvii. 12.

Like as a woman with child, that draweth near the time of her *delivery*, is in pain, and crieth out.
Isaiah xxvi. 7.

He hath sent me to heal the broken-hearted, to preach *deliverance* to the captives, and recovering of sight to the blind, to set at liberty those that are bound. *Luke* iv. 18.

He that spared not his own son, but *delivered* him up for us all, how shall he not, with him also, freely give us all things? *Rom.* viii. 32.

We allege what the Scriptures themselves do usually speak, for the saving force of the word of God; not with restraint to any certain kind of *delivery*, but howsoever the same shall chance to be made known. *Hooker.*

People have a superstitious belief, that in the labour of women it helpeth to the easy *deliverance*.
Bacon.

A mirth-moving jest,
Which his fair tongue, conceit's expositor,
Delivers in such apt and gracious words,
That aged ears play truant at his tales.
Shakspeare.

Are the cities, that I got with wounds,
Delivered up again with peaceful words? *Id.*

The constables have *delivered* her *over* to me, and she shall have whipping enough, I warrant her. *Id.*

He swore, with sobs,
That he would labour my *delivery*. *Id.*

On her fright and fears,
She is something before her time *delivered*. *Id.*

If seriously I may convey my thoughts
In this my light *deliverance*, I have spoke
With one that in her sex, her years profession,
Wisdom and constancy, hath amazed me more
Than I dare blame my weakness.
Id. All's Well that Ends Well.

By that seed
Is meant thy great *Deliverer*, who shall bruise
The serpent's head. *Milton.*

The earl was the taller, and much the stronger; but the duke had the neater limbs, and freer *delivery*.
Wotton.

Divers chymical experiments, delivered by sober authors, have been believed false, only because the menstruums were not as highly rectified, or exquisitely depurated, as those that were used by the *deliverers* of those experiments. *Boyle.*

Nor did he in any degree contribute to the *delivery* of his house, which was at first imagined, because it was so ill, or not at all, defended. *Clarendon.*

Thus she the captive did *deliver*;
The captive thus gave up his quiver. *Prior.*

Whate'er befalls, your life shall be my care;
One death or one *deliverance* we will share. *Dryden.*

Musidorus could not perform any action on horse or foot more strongly, or *deliver* that strength more nimbly, or become the *delivery* more gracefully, or employ all more virtuously. *Sidney.*

Him their *deliverer* Europe does confess;
All tongues extol him, all religions bless. *Halifax.*

I was charmed with the gracefulness of his figure and *delivery*, as well as with his discourses. *Addison.*

Charmed with that virtuous draught, the' exalted mind
All sense of woe *delivers* to the wind. *Pope.*

Lord Ligonier did not *deliver* the army (which you, in classical language, are pleased to call a palladium) into Lord Granby's hand. *Junius.*

It may be reckoned, therefore, a necessary characteristic of Divine Revelation, that it shall be *delivered* in a manner the most adapted to what are vulgarly called the meanest capacities: and by this perspicuity, both of precept and of doctrine, the whole Bible is remarkably distinguished. *Bishop Horsley.*

Your sentiments with respect to me are exactly like Mrs. Unwin's. She, like you, is perfectly sure of my *deliverance*, and often tells me so.
Cowper's Private Correspondence.

DELL, *n. s.* Goth. *dale*; Belg. *del*. See DALE.

The while, the same unhappy ewe,
Whose clouted leg her hurt doth shew,
Fell headlong into a *dell*. *Spenser.*

I know each lane, and every alley green,
Dingle, or bushy *dell*, of this wild wood. *Milton.*

But, foes to sunshine, most they took delight
In *dells* and dales, concealed from human sight.
Tickle.

But from mountain, *dell*, or stream
Not a fluttering zephyr springs;
Fearful lest the noon-tide beam
Scorch its soft, its silken wings. *Cunningham.*

Again the goddess speaks!—glad echo swells
The tuneful tones along her shadowy *dells*. *Darwin.*

DELLILE (Jacques), a celebrated French poet, born in 1738, at Clermont in Auvergne, and educated at the university of Paris. He was early distinguished for the brilliancy of his talents, and the extent of his acquirements; but the first work by which he made known his name to the public, and laid the foundation of his poetical fame, was a translation of Virgil's Georgics. This procured him a seat in the Academy. His next performance was an original work, entitled Les Jardins, which added considerably to his reputation. About this time, M. Le Comte de Choiseul Gouffier, who had formerly visited and described the interesting shores of Greece, was appointed ambassador to Constantinople, and Dellile was persuaded to accompany him to that city. Thence he went to Greece, where he remained for several months, and finally passed over to Asia Minor, where he was first attacked with a distemper in his eyes, that after his return deprived him entirely of sight. At Constantinople he wrote a considerable portion of his poem on Imagination, and on his return published a translation of the Æneid. He continued also to read lectures at Paris, till the revolution obliged him to emigrate into Switzerland. He afterwards visited Germany and England. Here, in misfortune and banishment, 'muses of melancholy inspiration,' he composed his poem Le Malheur et la Pitie, to give vent to his oppressed feelings. While he remained in England, he also trans-

lated the Paradise Lost. After France had become settled under Napoleon, he returned to his native land, where he died in the summer of 1813. His other works are L' Homme des Champs; ou, les Georgiques Francaises, 1808; Les Trois Regnes de la Nature, 1809; and La Conversation, 1812, a playful satire.

DELOS, an island of the Archipelago, very famous in ancient history. Originally it is reported to have been a floating island, but afterwards it became fixed. It was fabled to have been the birth-place of Apollo and Diana. It was governed by its own kings. Virgil mentions Anius a king of Delos, in the time of the Trojan war, who was afterwards high priest of Apollo, and entertained Æneas with great kindness. The Persians allowed the Delians to enjoy their ancient liberties, after they had reduced the rest of the Grecian islands. In after ages, the Athenians made themselves masters of it; and held it till they were driven out by Mithridates, who granted the inhabitants many privileges, and exempted them from all sorts of taxes. Strabo and Callimachus tell us that Delos was watered by the river Inapus: but Pliny calls it only a spring; and adds, that its waters swelled and abated at the same time with those of the Nile. At present there is no river in the island, but one of the noblest springs in the world, twelve paces in diameter, and enclosed partly by rocks, and partly by a wall. So sacred was the island of Delos held by the ancients, that hostilities were suspended by nations at war, when they happened to meet in this place. Livy tells us, that some Roman deputies being obliged to put in at Delos, in their voyage to Syria and Egypt, found the gallevs of Perseus king of Macedon, and those of Eumenes king of Pergamus, anchored in the same harbour, though these two princes were then at war.—Hence this island was a general asylum, and protection was extended to all living creatures, dogs excepted; for this reason it abounded with hares, no dogs being suffered to enter it. No dead body was suffered to be buried in it, nor child to be born there; all dying persons, and women ready to be delivered, were carried over to the neighbouring island of Rhenæa. It is now called Sdili.

DELOS, an extensive city in the above island, which occupies a spacious plain, reaching from the one coast to the other. It was well peopled, and, after the destruction of Corinth, the richest city in the Archipelago; merchants flocking thither from all parts, both on account of the immunity they enjoyed, and of its convenient situation between Europe and Asia. It contained many stately buildings; as the temple of Apollo, Diana, and Latona; an oval basin, made at an immense expense, for the representation of sea-fights; and a most magnificent theatre. The temple of Apollo was, according to Plutarch, begun by Erisichthon, the son of Cecrops; but afterwards enlarged and embellished at the common charge of all the states of Greece. It contained an altar built with horns of various animals, so artificially adapted to one another, that they hung together without cement. This altar is said to have been a cube; and the doubling it was a famous mathematical problem among the ancients. This went under the name of Problema Deliacum, and is said to have been proposed by the oracle, to free the country from a plague. The trunk of the famous statue of Apollo, mentioned by Strabo and Pliny, is still an object of great admiration to travellers. It is without head, feet, arms, or legs; but from the parts that yet remain it plainly appears, that the ancients did not exaggerate when they commended it as a wonder of art. It was of a gigantic size, though cut out of a single block of marble; the shoulders being six feet broad, and the thighs nine feet round. Plutarch tells us, in his Life of Nicias, that he caused to be set up, near the temple of Delos, a huge palm-tree of brass, which he consecrated to Apollo; and adds, that a violent storm of wind threw down this tree on a Colossean statue raised by the inhabitants of Naxos. Round the temple were magnificent porticoes built at the charge of various princes, as appears from inscriptions which are still very plain.

DELPHI, in ancient geography, a town of Phocis situated on the south-west extremity of mount Parnassus, famous for a temple and oracle of Apollo. A number of goats that were feeding on mount Parnassus, approached a place which had a deep and long perforation. The steam which issued from the hole seemed to inspire the goats, and they played and frisked about in such an uncommon manner, that the goatherd was tempted to lean on the hole, and see what mysteries the place contained. He was immediately seized with a fit of enthusiasm, and his expressions were so wild and extravagant, that they passed for prophecies. This circumstance was soon known, and many experienced the same enthusiastic inspiration. The place was revered; a temple erected to Apollo; and a city built, which became the most illustrious in Phocis. The influence of its oracle controlled the councils of states, directed the course of armies, and decided the fate of kingdoms.

The temple of Apollo was at first a kind of cottage covered with boughs of laurel. An edifice of stone was next erected by Trophonius and Agamedes, which subsisted about 700 years, and was burnt in the year 636 after the destruction of Troy, and A.A.C. 548. It is mentioned in the hymn to Apollo ascribed to Homer. An opulent and illustrious Athenian family, called Alcmæonidæ, which had fled from the tyrant Hippias, raised a new temple, the front of which was of Parian marble. The pediments were adorned with Diana, Latona, Apollo, Bacchus, the setting of the sun, the Muses, and the Thyades. The architraves were decorated with golden armour; bucklers suspended by the Athenians after the battle of Marathon; and shields taken from the Gauls under Brennus. In the portico were inscribed the celebrated maxims of the seven sages of Greece. There was an image of Homer, and in the cell was an altar of Neptune, with statues of the Fates, and of Jupiter and Apollo. Near the hearth before the altar, stood the iron chair of Pindar. In the sanctuary was an image of Apollo gilded. The enclosure was of great extent, and filled with treasures (in which many cities had con-

secrated tenths of spoils taken in war), and with the public donations of renowned states in various ages.

The oracles were delivered by a priestess called Pythia, who received the prophetic influence in the following manner. A lofty tripod, decked with laurel, was placed over the aperture, whence the sacred vapor issued. The priestess, after washing her body, and especially her hair, in the cold water of Castalia, mounted on it, to receive the divine effluvia. She wore a crown of laurel, and shook a sacred tree which grew close by. Having mounted the tripod, she was seized with the most violent paroxysms of frenzy, and in that situation delivered her oracular responses; and if she declined acting, they dragged her by force to the tripod. The habit of her order was that of virgins. The season of enquiry was in the spring, during the month called Busius; after which Apollo was supposed to visit the altars of the Hyperboreans.

The city of Delphi arose in the form of a theatre, upon the winding declivity of Parnassus, whose fantastic tops overwhelmed it like a canopy on the north, while two immense rocks rendered it inaccessible on the east and west, and the rugged and shapeless mount Cirphis defended it on the south. The foot of Cirphis was washed by the rapid Plistus, whose waters fell into the sea a few leagues from the city. This inaccessible and romantic situation from which the place derived the name of Delphi, or solitary, was rendered still more striking by the innumerable echoes which multiplied every sound, and increased the ignorant veneration of visitants for the god of the oracle. The principal inhabitants of Delphi, claiming an immediate relation to Apollo, were entitled to officiate in the rites of his sanctuary; and even the inferior ranks were continually employed in dances, festivals, processions, and all the gay pageantry of an elegant superstition. Delphi, lying in the centre of Greece, and, as was then imagined, of the universe, was conveniently situated for the conflux of votaries. It was customary for those who consulted the oracle to make rich presents to the god: his servants and priests feasted on the numerous victims which were sacrificed to him; and the rich magnificence of his temple had become proverbial even in the age of Homer. In aftertimes Crœsus, the wealthiest of monarchs, was particularly munificent in his donations. The sacred repository was, therefore, often the object of plunder. Neoptolemus the son of Achilles was slain, while sacrificing, by a priest, on suspicion of a design of that kind. Xerxes divided his army at Panopeus, and proceeded with the main body through Bœotia into Attica, while a part, keeping Parnassus on the right, advanced along Schiste to Delphi; but they were seized with a panic when near Ilium, and fled. The divine board was seized by the Phocians under Philomelus, and dissipated in a long war with the Amphictyons. The Gauls experienced a reception like that of the Persians, and manifested similar dismay and superstition. Sylla, more wise, wanting money to pay his army, sent to borrow from the holy treasury; and when his messenger would have frightened him, by reporting that the sound of a harp had been heard from within the sanctuary, he replied, it was a sign that the god was happy to oblige him. But the temple, in the time of Strabo, was reduced to extreme poverty; and Apollo was silent. Nero attempted to drive him, as it were by violence, from the cavern; killing men at the mouth, and polluting it with blood. An oracle of Apollo at another place informed the consulters, that he should no more recover the power of utterance at Delphi, but enjoined the continuance of the accustomed offerings.

Yet the store appeared inexhaustible; and the robbery of Nero, who removed 500 brazen images, was rather regretted than perceived. The holy treasuries, though empty, served as memorials of the piety and glory of the cities which erected them. The Athenian portico preserved the beaks of ships and the brazen shields, trophies won in the Peloponnesian war; and a multitude of curiosities remained untouched. Constantine the Great, however, proved a more fatal enemy to Apollo and Delphi, than either Sylla or Nero. He removed the sacred tripods to adorn the Hippodrome of his new city; where these, with the Apollo, the statues of the Heliconian muses, and the celebrated Pan, dedicated by the Greek cities after the war with the Medes, were extant when Sozomen wrote his history. Afterwards Julian sent Oribasius to restore the temple; but he was admonished by an oracle to represent to the emperor the deplorable condition of the place. 'Tell him,' said the oracle, 'that the well-built court is fallen to the ground. Phœbus has not a cottage, nor the prophetic laurel, nor the speaking fountain, Cassotis; and even the beautiful water is extinct.'

DELPHINIA, a new alkali, procured by the action of dilute sulphuric acid, on the bruised unshelled seeds of the larkspur. The solution of sulphate, thus formed, is precipitated by subcarbonate of potassa. Alcohol separates from this precipitate the vegetable alkali in an impure state.

Pure delphinia is crystalline while wet, but becomes opaque on exposure to air. Its taste is bitter and acrid. When heated it melts; and on cooling becomes hard and brittle like resin. If more highly heated, it blackens and is decomposed. Water dissolves a very small portion of it. Alcohol and æther dissolve it very readily. The alcoholic solution renders syrup of violets green, and restores the blue tint of litmus reddened by an acid. It forms soluble neutral salts with acids. Alkalies precipitate the delphinia in a white gelatinous state like alumina.

DELPHINIC Acid. The name of an acid, extracted from the oil of the dolphin. It resembles a volatile oil; has a light lemon color, and a strong aromatic odor, analogous to that of rancid butter. Its taste is pungent, and its vapor has a sweetened taste of æther. It is slightly soluble in water, and very soluble in alcohol. The latter solution strongly reddens litmus. 100 parts of delphinic acid neutralise a quantity of base, which contains 9 of oxygen, whence its prime equivalent appears to be 11·11.

DELPHINIUM, dolphin flower, or larkspur;

in botany, a genus of the trigynia order, and polyandria class of plants; natural order twenty-sixth, multisiliquæ: CAL. none; petals five; nectarium bifid, and horned behind; siliquæ three or one. Species fourteen; two of which are perennial. They are herbaceous plants of upright growth, rising from eighteen inches to four feet in height, garnished with finely divided leaves, and terminated by long spikes of pentapetalous flowers of blue, red, white, or violet colors. One species, viz. D. consolida, is found wild in several parts of Britain, and grows in corn fields. The seeds are acrid and poisonous. When cultivated, the blossoms often become double. Sheep and goats eat this plant; horses are not fond of it; cows and swine refuse it. The annual larkspur makes a very fine appearance in gardens, and is easily propagated by seeds, being so hardy that it thrives in any soil or situation.

DELPHINUS, the dolphin, in zoology, a genus of fishes belonging to the order of cete. There are five species, viz. 1. D. delphis, the dolphin. This fish was consecrated to the gods, and, celebrated in the earliest time for its fondness of the human race, was honored with the title of the sacred fish. Arion the musician, when flung into the ocean by the pirates, was said to be received and saved by this benevolent fish. Its natural shape is almost straight, the back being very slightly incurvated, and the body slender; the nose long, narrow, and pointed, not much unlike the beak of some birds, for which reason the French call it l' oye de mer. It has forty teeth; twenty-one in the upper jaw and nineteen in the lower; a little above an inch long, conic at their upper end, sharp-pointed, bending a little in. They are placed at small distances from each other; so that when the mouth is shut, the teeth of both jaws lock into one another. The spout-hole is placed in the middle of the head; the tail is semilunar; the skin smooth, the color of the back and sides dusky, the belly whitish: it swims with great swiftness; and its prey is fish. It was formerly reckoned a great delicacy. This species of dolphin must not be confounded with that to which seamen give the name; the latter being quite another kind of fish, viz. the coryphæna hippuris of Linnæus, and the dorado of the Portuguese. 2. D. leucas, a species called by the Germans wit-fisch, and by the Russians beluga; both signifying white fish: but to this the latter add morskaia, 'of the sea,' to distinguish it from a species of sturgeon so named. They are numerous in the gulf of St. Lawrence, and go with the tide as high as Quebec. 3. D. orca, the grampus, is found from the length of fifteen feet to that of twenty-five. It is remarkably thick in proportion to its length, one of eighteen feet being in the thickest part ten feet diameter. With reason then did Pliny call this 'an immense heap of flesh armed with dreadful teeth.' It is extremely voracious; and will not even spare the porpoise, a congenerous fish. It is said to be a great enemy to the whale. 4. D. orca ensidorsatus, the sword fish. The nose is truncated; the teeth, of which there are forty in both jaws, are sharp-pointed; and on the back is a very long sword-like spine, or bony fin. It inhabits the European seas, the Atlantic, towards the Antarctic Pole, and Davis's Straits. It is the largest species of the genus, being twenty-four or twenty-five feet long, and from ten to thirteen feet in diameter where thickest; the lower jaw is much larger than the upper: the spout-hole is on the top of the head, and has two orifices. The spine on the back is often six feet long. It is broadest at the base, and resembles a scimitar or bent sword; being, however, covered with the common skin of the back. It is a bitter enemy to the whale, and carries on a constant war with the seals. It also feeds on flounders. 5. D. phocæna, the porpoise. This species is found in vast multitudes in all parts of the British seas; but in greatest numbers at the time when fish of passage appear, such as mackerel, herrings, and salmon, which they pursue up the bays.

DELPHOS, now called Castri, a town, or rather village, of Turkey in Asia, in Livadia; occupying part of the site of the ancient Delphi. Some vestiges of temples are visible; and above them, in the mountain side, are sepulchres, niches with horizontal cavities for the body, some of which are covered with slabs. A monastery is erected on the site of the Gymnasium. Strong terrace walls and other traces of a large edifice remain. The village is at a distance. Castalia is on the right hand in ascending to it, the water coming from on high and crossing the road; a steep precipice, above which the mountain still rises immensely, continuing on in that direction. The village consists of a few cottages covering the site of the temple and oracle.

DELTA, a part of Lower Egypt, which occupies a considerable space of ground between the branches of the Nile and the Mediterranean Sea: the ancients call it Delta, because it is in the form of a triangle, like the Greek Δ. It is about 130 miles along the coast from Damietta to Alexandria, and seventy on the sides from the place where the Nile begins to divide itself. It is the most fertile country in all Egypt, and it rains more there than in other parts, but the fertility is chiefly owing to the inundation of the Nile. The principal towns on the coast are Damietta, Rosetta, and Alexandria; but, within land, Menousia, and Maala or Elmala. See EGYPT.

DE'LTOIDE, *adj.* from delta, the fourth letter of the Greek alphabet; so called by reason of its resembling this letter. An epithet applied to a triangular muscle arising from the clavicula, and from the process of the same, whose action is to raise the arm upward.

Cut still more of the *deltoide* muscle, and carry the arm backward. *Sharp's Surgery.*

DELU'DE, *v. a.* DELU'DER, *n. s.* DELU'DABLE, *adj.* } Ital. and Lat. *deludere*, from *de*, and *ludo* to deceive. To cheat; deceive; impose upon: deludable is, easily imposed upon.

O, give me leave, I have *deluded* you;
'Twas neither Charles, nor yet the duke.
Shakspeare. Henry VI.

Not well understanding omniscience, he is not so ready to deceive himself, as to falsify unto him whose cogitation is no ways *deludable*.
Browne's Vulgar Errours.

Let not the Trojans, with a feigned pretence
Of proffered peace, *delude* the Latian prince.
Dryden.

And thus the sweet *deluders* tune their song.
Pope.

For when our poor *deluded* people at home, and foreigners abroad, read the poisonous and inflammatory libels that are daily published with impunity —— —————— they act accordingly.
Junius.

Where wavering man, betrayed by venturous pride
To chase the dreary paths without a guide,
As treacherous phantoms in the mist *delude*,
Shuns fancied ills, or chases airy good.
Johnson. Vanity of Human Wishes.

DELVE, *v. a.* & *n. s.* } Sax. ᵹelꝑan; Teut.
DE'LVER, *n. s.* } *delben*; Belgic *delven*; Goth. *dalf*, a subterranean place. Screnius refers to this last as the origin of the Saxon bedelfan, to bury; and Wiclif confirms this etymology by using dalf for delve. See below. To dig, and, figuratively, to endeavour to fathom the mind. It is used as a substantive by Spenser and Jonson, for the pit or place dug: a delver is a digger.

But he that hadde taken oon ghede forthe and *dalf* into the earthe: and hidde the money of his Lord.
Wiclif. Matt. xxv.

When Adam *delved*, and Eve span,
Who was then the Gentleman? *Old Ballad.*

He by and by
His feeble feet directed to the cry;
Which to that shady *delve* him brought at last,
Where Mammon erst did sun his treasury.
Spenser.

It shall go hard,
But I will *delve* one yard below the mines,
And blow them at the moon. *Shakspeare.*

What's his name and birth?
—I cannot *delve* him to the root: his father
Was called Sicilius. *Id.*

Such a light and mettled dance
Saw you never yet in France;
And by leadmen, for the nonce,
That turn round like grindle-stones,
Which they dig out fro' the *delves*,
For their bairns' bread, wives, and selves.
Ben Jonson.

Delve of convenient depth your thrashing floor,
With tempered clay, then fill and face it o'er.
Dryden.

The filthy swine with *delving* snout
The rooted forest undermine. *Philips.*

DELVINO, one of the principal towns of Lower Albania, between Joannina and Butrinto. It stands on the side of a mountain, on the site of the ancient Eleus, between the Paria, or ancient Xanthus, and Pistrini; and is well defended by a castle. Population 8000. It is fifty miles E. N. E. of Larissa.

DE'LUGE, *n. s.* Fr. *deluge*; Span. Ital. and Portug. *diluvio*; Lat. *diluvium*, from *diluo*, *de* and *luo*; Gr. λυω, to wash.

If there had not been so deep a *deluge* of sin, there had been none of the waters.
Bishop Hall Contemplations.

But if with bays and dams they strive to force
His channel to a new or narrow course,
No longer then within his banks he dwells,
First to a torrent, then a *deluge*, swells. *Denham.*

The apostle doth plainly intimate, that the old world was subject to perish by a *deluge*, as this is subject to perish by conflagration. *Burnet's Theory.*

At length corruption, like a general flood,
Shall *deluge* all. *Pope.*

Still the battering waves rush in
Implacable, till *deluged* by the foam,
The ship sinks, foundering in the vast abyss.
Philips.

The restless flood the land would overflow,
By which the *deluged* earth would useless grow.
Blackmore.

DELUGE. Several deluges are recorded in history; as that of Ogyges, which overflowed almost all Attica; and that of Deucalion, which drowned all Thessaly in Greece: the most memorable however was the universal deluge or Noah's flood, which overflowed and destroyed the whole earth; and from which only Noah, and those with him in the ark, escaped. See ANTEDILUVIAN, an article in which we have entered into this subject at some length, and particularly its epoch. See also CHRONOLOGY.

But the deluge is a topic of great interest both to science and religion. It has given birth, therefore, to various theories and controversies on every point connected with it; and, while we cannot devote much space to the review of them in this work, some of the principal considerations that have been offered respecting its causes and effects may be acceptable to the reader. The great points in question may be reduced to three: 1. Was the deluge universal, as is commonly supposed, or partial? 2. Was it from natural agency only, and if so what natural agency effected this mighty convulsion? 3. What were the principal effects and changes resulting?

1. Isaac Vossius and bishop Stillingfleet are amongst the most respectable supporters of an opinion that the deluge was but *partial*. But the reasoning of the former upon this subject is a little involved in our second question, respecting the agency employed; for it rests partly upon the difficulty there must have been in effecting a universal deluge. 'Many miracles,' he says, 'must have concurred; but God works no miracles in vain. What need was there to drown those lands where no men lived, or are yet to be found? Although we should believe that part of the earth only to have been overflowed by the waters which we have mentioned, and which is not the hundredth part of the terrestrial globe, the deluge will nevertheless be universal (œcumenical), since the destruction was universal, and overwhelmed the whole habitable world.' Bishop Stillingfleet adopted the same opinion, from a persuasion that the earth was by no means fully peopled, and therefore there was no necessity for the deluge being universal. 'I cannot,' says he, 'see any urgent necessity from the Scripture to assert that the flood did spread itself all over the surface of the earth. That all mankind, those in the ark excepted, were destroyed by it, is most certain according to Scripture. When the Lord said that he would destroy man from the face of the earth, it could not be any particular deluge of so small a country as Palestine, as some have ridiculously imagined; for we find a universal

corruption in the earth mentioned as the cause; a universal threatening upon all men for this cause; and afterwards a universal destruction expressed as the effect of this flood. So then it is evident that the flood was universal with regard to mankind; but from thence follows no necessity at all of asserting the universality of it as to the globe of the earth, unless it be sufficiently proved; and what reason can there be to extend the flood beyond the occasion of it, which was the corruption of mankind? The only probability of asserting the universality of the flood, as to the globe of the earth, is from the destruction of all living creatures, together with man. Now though men might not have spread themselves over the whole surface of the earth, yet beasts and creeping things might, which were destroyed with the flood; for it is said that 'all flesh died that moved upon the earth, and every man.' To what end should there be not only a note of universality added, but such a particular enumeration of the several kinds of beasts, creeping things, and fowls, if they were not all destroyed? To this I answer; I grant that, as far as the flood extended, all these were destroyed; but see no reason to extend the destruction of these beyond that compass and space of the earth where men inhabited, because the punishment upon the beasts was occasioned by, and could not be concomitant with the destruction of man; but (the occasion of the deluge being the sin of man, who was punished in the beasts that were destroyed for his sake, as well as in himself) where the occasion was not, as where there were animals and no men, there seems no necessity of extending the flood thither.'

The bishop, therefore, thinks it probable that this visitation of divine judgment extended only to the continent of Asia, and those animals only which were immediately connected with mankind; and he thinks the latter a sufficient reason for Noah's preserving the pairs of animals which he was commanded to take with him into the ark. But it is shown, under the article ANTEDILUVIAN, that, according to the most moderate computations, the world was probably more full of inhabitants than at present; the expression of Scripture is strong, 'that the earth was *filled* with violence:' and if it were admitted that 'the earth' means only continental Asia, the supposition of a partial deluge involves almost all the difficulties, with regard to the agency employed, that are supposed to be connected with that of a universal one. If the tops of the highest mountains, in a very considerable part of the earth, were covered, the laws of gravity would carry the water that must have been thus elevated over all the ordinary habitations of men, or it would require a miracle to suspend their operation. We shall see that nothing strictly miraculous is supposed on our hypothesis of a universal deluge.

Mr. Bryant, in his Ancient Mythology, adverts at great length to the traditional traces of the fact of a universal deluge in all the early fables and histories of the heathen world. He even contends that this fact furnished the principal, if not the only foundation of ancient idolatry; that the first of all the heathen deities was Noah; that all the ancient nations regarded him as their founder; and that he, his sons, and the first patriarchs, are alluded to, in most if not all the religious ceremonies. The Egyptian Osiris (he says) was the same with Ham the son of Noah; though the name was sometimes bestowed on Noah himself. Osiris, according to Diodorus Siculus, was wonderfully preserved in an ark, and taught the use of the vine; to build, plant, &c. 'We may reasonably suppose,' says Mr. Bryant, 'that the particulars of this extraordinary event would be gratefully commemorated by the patriarch himself, and transmitted to every branch of his family; that they were made the subject of domestic converse, where the history was often renewed, and ever attended with a reverential awe and horror, especially in those who had been witnesses to the calamity, and had experienced the hand of Providence in their favor. When there was a falling off from the truth, we might farther expect, that a person of so high a character as Noah, so particularly distinguished by the Deity, could not fail of being reverenced by his posterity; and, when idolatry prevailed, that he would be one of the first among the sons of men to whom divine honors would be paid. Lastly, we might conclude, that these memorials would be interwoven in the mythology of the Gentile world; and that there would be continual allusions to these ancient occurrences, in the rites and mysteries as they were practised by the nations of the earth. In conformity to these suppositions, I shall endeavor to show that these things did happen; that the history of the deluge was religiously preserved in the first ages; that every circumstance of it is to be met with among the historians and mythologists of different countries, and traces of it are to be found particularly in the sacred rites of Egypt and of Greece.'

If the success of this author, in this great undertaking, was not complete; if his theories involve many doubtful points of history, and some altogether conjectural assumptions; he embodies on the other hand many unquestionably interesting and important facts, connected with this subject, and which the reader who is desirous of a complete review of it should not overlook. Of Noah, he says, they styled him Prometheus, Deucalion, Atlas, Theuth, Zuth, Xuthus, Inachus, Osiris. When there began to be a tendency towards idolatry, and the adoration of the sun was introduced by the posterity of Ham, the title of Helius, among others, was conferred upon him. Noah was the original Zeus and Dios. He was the planter of the vine, and inventor of fermented liquors: whence he was denominated Zeuth, which signifies ferment, rendered Zeus by the Greeks. He was also called Dionusus, interpreted by the Latins Bacchus, but very improperly. Bacchus was Chus the grandson of Noah; as Ammon may be esteemed Ham, so much reverenced by the Egyptians. Among the people of the east, the true name of the patriarch was preserved; they called him Noas, Naus, and sometimes contracted Nous; and many places of sanctity, as well as rivers, were denominated from him. Anaxagoras of Clazomenæ had obtained some knowledge of him in Egypt.

By him the patriarch was denominated Noas or Nous; and both he and his disciples were sensible that this was a foreign appellation; notwithstanding which he has acted as if it had been a term of the Greek language. Eusebius informs us, that the disciples of Anaxagoras say, 'that Nous is by interpretation, of the deity Dis or Dios; and they likewise esteem Nous the same as Prometheus, because he was the renewer of mankind, and was said to have fashioned them again,' after they had been in a manner extinct. Suidas has preserved, from some ancient author, a curious memorial of this wonderful personage, whom he affects to distinguish from Deucalion, and styles Nannacus. According to him, this Nannacus was a person of great antiquity, and prior to the time of Deucalion. He is said to have been a king, who, foreseeing the approaching deluge, collected every body together, and led them to a temple, where he offered up his prayers for them, accompanied with many tears.' Other well known traditions, mentioned by Stephenson, speak of the flood of Deucalion in which all mankind were destroyed. Afterwards, when the surface of the earth began to be again dry, Zeus ordered Prometheus and Minerva to make images of clay in the form of men; and, when they were finished, he called the winds, and made them breathe into each, and rendered them vital.' From these accounts, Mr. Bryant concludes: 'However the story may have been varied, the principal outlines plainly point out the person who is alluded to in these histories. It is, I think, manifest, that Annacus, and Nannacus, and even Inachus, relate to Noachus or Noah. And not only these, but the histories of Deucalion and Prometheus have a like reference to the patriarch: in the 600th year, and not the 300th, of whose life the waters prevailed upon the earth. He was the father of mankind, who were renewed in him. Hence he is represented by another author, under the character of Prometheus, as a great artist, by whom men were formed anew, and were instructed in all that was good. He seems in the east to have been called Noas, Noasis, Nasus, and Nus; and by the Greeks his name was compounded Dionusus. The Amonians, wherever they came, founded cities to his honor; hence places called Nusa often occur, and many of them are mentioned by ancient authors. These, though widely distant, being situated in countries far removed, yet retained the same original histories; and were generally famous for the plantation of the vine. Misled by this similarity of traditions, people in after times imagined that Dionusus must necessarily have been where his history occurred; and as it was the turn of the Greeks to place every thing to the account of conquest, they made him a great conqueror, who went over the face of the whole earth, and taught mankind the plantation of the vine. Though the patriarch is represented under various titles, and even these not always uniformly appropriated; yet there continually occur such peculiar circumstances of his history, as plainly point out the person referred to. The person preserved is always mentioned as preserved in an ark. He is described as being in a state of darkness, which is represented allegorically as a state of death. He then obtains a new life, which is called a second birth; and is said to have his youth renewed. He is, on this account, looked upon as the first born of mankind; and both his antediluvian and postdiluvian states are commemorated, and sometimes the intermediate state is also spoken of. Diodorus calls him Deucalion; but describes the deluge as almost universal.' We have noticed the corresponding Chaldean tradition, &c. mentioned by Berosus in the article ANTEDILUVIANS. While we consider the further range of these traditional accounts of the flood over the continent of India, and as far as China, has also its weight in establishing the Mosaic accounts, we shall shortly advert to the present and permanent effects of such a visitation, now remaining, as another proof both of the fact of a deluge, and of its universality. At present we enquire:

2. *What was the nature of the agency employed on this occasion?* Dr. Thomas Burnet, in his Telluris Theoria Sacra, endeavours to show, that all the waters in the ocean are not sufficient to cover the earth to the depth assigned by Moses. Supposing the sea drained quite dry, and all the clouds of the atmosphere dissolved into rain, we should still want the greatest part of the water of a deluge. According to the Dr. no less than eight oceans would have been requisite. To get clear of this difficulty, he and others have adopted Descartes's theory. That philosopher will have the antediluvian world to have been perfectly round and equal, without mountains or valleys. He accounts for its formation on mechanical principles, by supposing it at first in the condition of a thick turbid fluid replete with divers heterogeneous matters; which, subsiding by slow degrees, formed themselves into different concentric strata, or beds, by the laws of gravity. Dr. Burnet improves on this theory, by supposing the primitive earth to have been no more than a crust investing the water contained in the ocean, and in the central abyss, which he and others suppose to exist in the bowels of the earth. See ABYSS. At the time of the flood, this outward crust broke in a thousand places; and sunk down among the water, which thus spouted up in vast cataracts, and overflowed the whole surface. He supposes also, that before the flood there was a perfect coincidence of the equator with the ecliptic, and consequently that the antediluvian world enjoyed a perpetual spring; but that the violence of the shock, by which the outer crust was broken, shifted also the position of the earth, and produced the present obliquity of the ecliptic. This theory is not only equally arbitrary with the former, but directly contrary to the words of Moses, who assures us, that all the high hills were covered; while Burnet affirms that there were no hills then in being. Dr. Hook conjectured that the shell of earth was subjected at the deluge to a compression into a prolate spheroid, thereby pressing out the water of an abyss under the earth. Dr. Halley ascribes the deluge to the shock of a comet, whereby the polar and diurnal rotation of the globe was changed; and the ingenious Whiston so far adopted and improved upon this hypothesis, that he published a tract

on the subject entitled, The Cause of the Deluge demonstrated.

The theories above enumerated, though sanctioned by those names which entitled them to our notice, are, we conceive, one and all, destitute of any thing amounting to proof. The following, which endeavours to account for this most remarkable event, without doing any violence to the established laws of nature, is the hypothesis, we believe, of a Mr. James Tytler, a chemist of Edinburgh, who contributed largely to the Encyclopædia Britannica, from which work we make the extract.

1. 'If we consider the quantity of water requisite for the purpose of the deluge, it will not appear so very extraordinary as has been commonly represented. The height of the highest hills is thought not to be quite four miles. It will therefore be deemed a sufficient allowance, when we suppose the waters of the deluge to have been four miles deep on the surface of the ground. Now it is certain, that water, or any other matter, when spread out at large upon the ground, seems to occupy an immense space in comparison of what it does when contained in a cubical vessel, or when packed together in a cubical form. Suppose we wanted to overflow a room sixteen feet every way, or containing 258 square feet, with water, to the height of one foot, it may be nearly done by a cubical vessel of six feet filled with water. A cube of eight feet will cover it two feet deep, and a cube of ten feet will very nearly cover it four feet deep. It makes not the least difference whether we suppose feet or miles to be covered. A cube of ten miles of water would very nearly overflow 256 square miles of plain ground to the height of four miles. But if we take into our account the vast number of eminences with which the surface of the earth abounds, the above-mentioned quantity of water would do a great deal more. If, therefore, we attempt to calculate the quantity of water sufficient to deluge the earth, we must make a very considerable allowance for the bulk of all the hills on its surface. To consider this matter, however, in its utmost latitude: the surface of the earth is supposed, by the latest computations, to contain 199,512,595 square miles. To overflow this surface to the height of four miles, is required a parallelopiped of water sixteen miles deep, and containing 49,878,148 square miles of surface. Now, considering the immense thickness of the globe of the earth, it can by no means be improbable, that this whole quantity of water may be contained in its bowels, without the necessity of any remarkable abyss or huge collection of water, such as most of our theorists suppose to exist in the centre. It is certain, that as far as the earth has been dug, it has been found not dry, but moist; nor have we the least reason to imagine that it is not, at least, equally moist all the way down to the centre. How moist it really is cannot be known, nor the quantity of water requisite to impart to it the degree of moisture it has; but we are sure it must be immense. The earth is computed to be nearly 8000 miles in diameter. The ocean is of an unfathomable depth; but there is no reason for supposing it more than a few miles. To make all reasonable allowances, however, we shall suppose the whole solid matter in the globe to be only equal to a cube of 5000 miles; and even on this supposition we shall find, that all the waters of the deluge would not be half sufficient to moisten it. The above-mentioned parallelopiped of water would indeed contain 798,050,368 cubic miles of that fluid; but the cube of earth containing no less than 125,000 millions of cubic miles, it is evident that the quantity assigned for the deluge would be scarcely known to moisten it. It could have indeed no more effect this way, than a single pound of water could have upon 150 times its bulk of dry earth. We are persuaded, therefore, that any person who will try by experiment how much water a given quantity of earth contains, and from that experiment will make calculations with regard to the whole quantity of water contained in the bowels of the earth, must be abundantly satisfied, that though all the water of the deluge had been thence derived, the diminution of the general store would, comparatively speaking, have been next to nothing. 2. It was not from the bowels of the earth only that the waters were discharged, but also from the air; for we are assured by Moses, that it rained forty days and forty nights. This source of the diluvian waters has been considered as of small consequence by almost every one who has treated on the subject. We shall transcribe the general opinion from the Universal History, Vol. I. where it is very fully expressed. 'According to the observations made of the quantity of water that falls in rain, the rains could not afford one ocean, nor half an ocean, and would be a very inconsiderable part of what was necessary for a deluge. If it rained forty days and forty nights throughout the whole earth at once, it might be sufficient to lay all the lower grounds under water, but it would signify very little as to the overflowing of the mountains; so that it has been said, that if the deluge had been made by rains only, there would have needed not forty days, but forty years, to have brought it to pass. And if we suppose the whole atmosphere condensed into water, it would not all have been sufficient for this effect; for it is certain, that it could not have risen above thirty-two feet, the height to which water can be raised by the pressure of the atmosphere; for the weight of the whole air, when condensed into water, can be no more than equal to its weight in its natural state, and must become no less than 800 times denser; for that is the difference between the weight of the heaviest air and that of water.' On this subject we must observe, that there is a very general mistake with regard to the air, similar to the above-mentioned one regarding the earth. Because the earth below our feet appears to our senses firm and compact, therefore the vast quantity of water, contained even in the most solid parts of it, and which will readily appear on proper experiment, is overlooked, and treated as a non-entity. In like manner, because the air does not always deluge with excessive rains, it is also imagined that it contains but very little water. Because the pressure of the air is able to raise only thirty-two feet of water on the surface of the earth, it is therefore supposed we

may know to what depth the atmosphere could deluge the earth, if it was to let fall the whole water contained in it. But daily observations show, that the pressure of the atmosphere has not the least connexion with the quantity of water it contains. Nay, if there is any connexion, the air seems to be lightest when it contains most water. In the course of a long summer's drought, for instance, the mercury in the barometer will stand at thirty inches, or little more. If it does so at the beginning of the drought, it ought to ascend continually during the time the dry weather continues; because the air all the while is absorbing water in great quantity from the surface of the earth and sea. This, however, is known to be contrary to fact. At such times the mercury does not ascend, but remains stationary; and what is still more extraordinary, when the drought is about to have an end, the air, while it yet contains the whole quantity of water it absorbed, and has not discharged one single drop, becomes suddenly lighter, and the mercury will perhaps sink an inch before any rain falls. The most surprising phenomenon, however, is yet to come. After the atmosphere has been discharging for a number of days successively a quantity of matter 800 times heavier than itself, instead of being lightened by the discharge, it becomes heavier, nay, specifically heavier than it was before. It is also certain, that very dry air, provided that it is not at the same time very hot, is always heaviest; and the driest air which we are acquainted with, namely, Dr. Priestley's dephlogisticated air, is considerably heavier than the air we commonly breathe. For these reasons we think the quantity of water contained in the whole atmosphere ought to be considered as indefinite, especially as we know that by whatever agent it is suspended, that agent must counteract the force of gravity, otherwise the water would immediately descend; and while the force of gravity in any substance is counteracted, that substance cannot appear to us to gravitate at all. 3. The above considerations render it probable, at least, that there is in nature a quantity of water sufficient to deluge the world, provided it was applied to the purpose. We must next consider whether there is any natural agent powerful enough to effect this purpose. We shall take the phrases used by Moses in their most obvious sense. The breaking up of the fountains of the deep we may reasonably suppose to have been the opening of all the passages, whether small or great, through which the subterraneous waters possibly could discharge themselves on the surface of the earth. The opening of the windows of heaven we may also suppose to be the pouring out the water contained in the atmosphere through those invisible passages by which it enters in such a manner as totally to elude every one of our senses, as when water is absorbed by the air in evaporation. As both these are said to have been opened at the same time, it seems from thence probable, that one natural agent was employed to do both. Now it is certain, that the industry of modern enquirers has discovered an agent unknown to the former ages, and whose influence is so great, that with regard to this world it may be said to have a kind of omnipotence. The agent we mean is electricity. It is certain, that, by means of it, immense quantities of water can be raised to a great height in the air. This is proved by the phenomena of water-spouts. Mr. Forster relates, that he happened to see one break very near him, and observed a flash of lightning proceed from it at the moment of its breaking. The conclusion from this is obvious. When the electric matter was discharged from the water, it could no longer be supported by the atmosphere but immediately fell down. Though water-spouts do not often appear in this country, yet every one must have made an observation somewhat similar to Mr. Forster's. In a violent storm of thunder and rain after every flash of lightning, or discharge of electricity from the clouds, the rain pours down with increased violence; thus showing that the cloud, having parted with so much of its electricity, cannot longer be supported in the form of vapor, but must descend in rain. It is not, indeed, yet discovered that electricity is the cause of the suspension of water in the atmosphere; but it is certain that evaporation is promoted by electrifying the fluid to be evaporated. It may therefore be admitted, as a possibility, that the electric fluid contained in the air is the agent by which it is enabled to suspend the water which rises in vapor. If, therefore, the air is deprived of the due proportion of this fluid, it is evident that rain must fall in prodigious quantities. Again: we are assured from the most undeniable observations, that electricity is able to swell up water on the surface of the earth. This we can make it do even in our trifling experiments; and much more must the whole force of the fluid be supposed capable of doing it, if applied to the waters of the ocean, or any others. The agitation of the sea in earthquakes is a sufficient proof of this. It is certain, that at these times there is a discharge of a vast quantity of electric matter from the earth into the air; and, as soon as this happens, all becomes quiet on the surface of the earth. From a multitude of observations it also appears, that there is at all times a passage of electric matter from the atmosphere into the earth, and vice versâ from the earth into the atmosphere. There is, therefore, no absurdity in supposing the Deity to have influenced the action of the natural powers in such a manner that for forty days and nights the electric matter contained in the atmosphere should descend into the bowels of the earth; if, indeed, there is occasion for supposing any such immediate influence at all, since it is not impossible that there might have been, from some natural cause, a descent of this matter from the atmosphere for that time. But by whatever cause the descent was occasioned, the consequence would be, the breaking up of the fountains of the deep, and the opening of the windows of heaven. The water contained in the atmosphere being left without support, would descend in impetuous rains; while the waters of the ocean, those from which fountains originate, and those contained in the solid earth itself, would rise from the very centre, and meet the waters which descended from above. Thus the breaking up of the fountains of the deep, and

the opening the windows of heaven, would accompany each other, as Moses tells us they actually did; for, according to him, both happened on the same day. In this manner the flood would come on quietly and gradually, without that violence to the globe which Burnet, Whiston, and other theorists, are obliged to suppose. The abatement of the waters would ensue on the ascent of the electric fluid to where it was before. The atmosphere would then absorb the water as formerly: that which had ascended through the earth would again subside; and thus every thing would return to its pristine state.'

3. We conclude by noticing some of the alterations and effects which are supposed to have taken place in consequence of the deluge. One of these is the much greater quantity of water in the present than in the old world. Dr. Keill has, indeed, endeavoured to prove, that the present extent of the surface of the waters is necessary to raise such a quantity of vapors as may supply the surface of the earth with rain and with springs. In answer to this it is said, that it may justly be questioned whether all springs are derived from the vapors raised by the sun's heat? and, secondly, Whether the primitive earth stood in need of such a quantity of rain to render it fertile as the present? Dr. Woodward supposes the antediluvian seas to have been nearly of the same extent with those at present, because 'the spoils of the sea, the shells and other marine bodies, are left in such prodigious numbers in the earth, that they could not have been left in such quantities, had not the seas occupied much the same space as they do now.' This argument, however, is thought by Mr. Cockburn to be inconclusive; and that the seas in the present earth are vastly more extended, and consequently the dry land so much less in proportion, may be inferred, he thinks, from the great multitude of islands that lie near the shores of the greater continents, &c. To all this it may be replied, that the Mosaic account says nothing of the extent of the seas either before or after the flood; but simply tells us, that the waters were poured out upon the surface of the earth from the windows of heaven and the fountains of the deep, and that as the flood decreased the waters returned from off the face of the earth. That the fish, as well as land animals, were more numerous in the antediluvian world than now when such quantities are destroyed by mankind, is also probable, as we see they abound to this day in uninhabited places. This may account for the astonishing quantities of exuviæ to be met with in many different parts of the earth; but from the formation of islands nothing can be concluded concerning the antediluvian world. The late discoveries have shown that many islands have a volcanic origin; that others are formed by the growth of coral; and some by an accumulation of sea-weeds and other matters floating on the surface of the ocean, and detained upon sand-banks and sunk rocks; while not a few of those near the great continent owe their origin to the quantities of mud brought down by the great rivers which fall into the ocean. The inferior fertility of the earth after the deluge is much insisted upon by the same author.

There has been a valuable addition to the speculations we have noticed above, in a modern work of the Rev. Mr. Townsend, entitled, The Character of Moses established for Veracity as an Historian, recording Events from the Creation to the Deluge. It might be said on opening this volume, Is it necessary again to take up arms in defence of Moses? is not the phalanx of wise and good men who have already stood forth in his behalf sufficient to secure him from any new attack? It is true, indeed, that the ægis of celestial wisdom has often darted its benumbing rays on the impious cavillers, but they rise ever with new courage from the ruin which had overwhelmed them, and rush with blind rage on the bulwarks whence they have been so often repelled. They have begun, of late, to try the effect of new methods of assault, and to exult in the advantageous display of their resources. It was no small triumph over Revelation to have proved that the earth was never created, but was originally a splinter struck off from the sun by a heavy body which happened to impinge upon it. But a great Epicurean philosopher recently defunct, has proceeded much further, and has finally developed the theory of the animal creation. It seems that the primitive world was one vast pool, in which all creatures sported in the shape of tadpoles, until some of them longing to walk on dry land, legs fitted for that purpose spontaneously sprang forth from the hinder quarters. Some affected hoofs, and gradually became horses; while others, of a more ambitious character, forced their humbler brethren to carry them on their backs. A great metaphysician, the pride of Scotland, proved, in defiance of Moses, that the primitive men wore tails, and that it was owing to the friction of tight clothing that their posterity have lost so ornamental an appendage. We have not heard, indeed, that the Sansculotte philosophers have recovered this badge, though they are well rid of all other symptoms of humanity; but it is impossible to say how far their perfectibility may reach, and to what new heights of dignity and honor they may be destined to ascend. It is surprising that the old-fashioned tradition has not been rooted out by so many improvements in science; but, as Moses has stood his ground so long, there seems a fair chance of his holding out to the last. Still it is impossible to say what new stratagems may be played off; and, as the enemy seems to be flushed with victory, we are not displeased to hail a new auxiliary. We therefore enter upon some of the facts and reasonings of the work before us with considerable satisfaction.

The design of Mr. Townsend is, to compare the present state of our knowledge of the history of man and of the earth with the relations contained in the early part of Genesis, and by this comparison to establish the character of the historian as a faithful recorder of events. The first part of his work contains a disquisition on the similar traditions which were handed down among many nations from the most ancient times; but the larger portion of the volume consists of a geological essay on the proofs that our globe has undergone a universal deluge. He shows that the creation of the world, and its emerging from a state of primitive chaos and

from a universal ocean, are not only contained in the works of the Grecian poets and philosophers, but are traced among several more ancient nations. In a curious extract from one of the Paranas are the following details:—'Of all objects in the created world, water existed first. The universe was dark. In this primeval water did Bhagavat, in a masculine form, repose for the space of a thousand ages; after which, the intention of creating other beings, for his own wise purposes, became predominant in the mind of the Supreme. In the first place, by his will, was produced one flower of the lotus; then the form of Brahma, who, emerging from the cup of the lotus, looked round and beheld, from the eyes of his four heads, an immeasurable expanse of water. In this flower he passed 500 years in wonder, perplexity, and prayer; after which he produced the four elements, and the genii which preside over them. From his right side there issued, by the omnipotence of God, a man of perfect beauty, Swayambhuva Menu, that is, son of the Self-existent; and from his left side a woman, named Satarupa.' (P. 43, 44.) To the same purpose is a passage in the ancient Edda of Sæmund, published by Resenius.

On the subject of the deluge, which occupies the principal part of this work, he prefers dwelling on arguments which are in a great measure new, and refers us to other writers for the historical testimony. This we approve, while we think that the historical part of the question is far from being exhausted. The Pralayas or periodical inundations of the Hindoos, as related in the Bhagavat—the successive destructions and renovations of the world, of which a corresponding account is given by Sæmund in the Runic Voluspa, and by Seneca from the representations of the Stoics—and the similar ceremonies practised in celebration of this event in Egypt and in Mexico, are facts which deserve a careful elucidation.

The proofs which Mr. Townsend brings forward of this universal catastrophe are diffused through a geological disquisition which occupies the larger portion of the volume. He takes a general survey of the surface of the earth, and the constitution and order of its strata, as far as they have been explored; in the course of which he unfolds to us in a very interesting manner the fruits of a diligent investigation, continued, as he informs us, during fifty years, and pursued in various parts of Europe. We may safely say that his volume contains far more information than any other work on the same subject.

In order to lay a foundation for the development of the more general phenomena to which he adverts, this author gives a brief view first of the geological formation of our own island. We regret that we cannot follow him through their details: they well prepare the reader to contemplate with interest the succession of formations in other countries. Under this head our author has given us brief notices afforded by travellers in almost every part of the world which has been explored by Europeans. They are very general, yet sufficient to justify the conclusion which Mr. Townsend has drawn from them. 'Whether we examine,' he observes, 'Europe, Asia, Africa, or America, the same arrangement may be traced; with this exception, that both in our island, and over the surface of the globe, in some places, the superior strata are deficient, and may be supposed to have been carried off, after they had been deposited in the bosom of the ocean. This arrangement, as already stated, includes granite, gneiss, slate, and argillaceous schist, mountain lime-stone, coal, schist, calcareous rocks, with clay, sand, chalk, and its integument of sand and clay.'

The geological theory adopted by Mr. Townsend is highly favorable to this part of the Scriptural History. If, with him, we can trace the actual operation of agents sufficiently powerful to elevate the continent of South America, (which this author conceives to have been those now operating in her abundant volcanoes), and other such extensive regions from the depths of the ocean, it is no longer difficult to conceive, that the waters may have covered the highest mountains, and that great tracts of habitable land may have been submerged.

But absolute and distinct proofs of this event are to be found in the dislocations of strata, and in the phenomena connected with alluvial depositions. There is no part of the earth in which the violent dislocations of the regular strata are not to be found; and they are chiefly abundant in mountainous tracts, of which no other proof need be cited than the vertical position which the strata forming high mountains now hold, while we are assured that these very strata were originally horizontal. But even in the most level countries we need not go far for evidences of these convulsions. Every river, every brook which breaks out under our feet, and every valley which diversifies the surface, owes its existence to the disruption of strata. All the rock formations were at first unbroken and continuous; wherever a valley occurs there is now an interruption of this continuity. That these hollows were not the mere effect of rivers which have worn out courses for their waters may be proved by a variety of geological facts which we have not room to introduce here; but it is put in sufficiently strong light by Mr. Townsend's observations on springs, which are in a great measure new, and of very general interest. Every stratum of rock, before it becomes broken up, carries with it in its course under the surface a stratum of water, which percolates its stony beds, and is confined between impervious layers of clay. It is only where these subterranean courses are disturbed, and the strata are torn asunder by some extraneous force, that fountains and rivers burst forth. These dislocations and disturbances of strata can only be attributed to the agency of vast torrents every where flowing over and disorganising the surface of the earth, and such torrents can only be furnished by the incursions of the ocean. Land floods and rivers are the effects of the previous disruption of the strata, and therefore cannot be considered the efficient causes.

The production of these phenomena by the waters of a deluge is further proved by *alluvial deposit*. The vast extent of alluvions, independently of all other proof, declares that the

ocean gave them birth. One great accumulation of debris fills nearly the whole of Flanders and Holland; it reaches across the channel, and covers the southern and eastern counties of England, concealing under it, at a great depth, the regular strata of these districts. Another alluvion forms Lower Saxony and Holstein. Similar appearances occur in all level countries, and valleys are generally filled with these accumulations, through the midst of which the feeble streams of the present rivers have opened for themselves diminutive channels. That these accumulations were affected at once by vast oceanic torrents, and not by the gradual influence of rain and land floods, appears, Mr. T. observes, from the alluvial strata not being mixed or blended together, but frequently disposed according to their specific gravity. The vast fragments of rock which are found scattered over plains and mountains, in so many parts of the earth, at great distances from their native mountains, lead us forcibly to the same inference.

One of the most important observations which relates to these deposits is the following:—'In all the alluvial districts here particularly noticed, it appears that only one bed of vegetable earth is to be seen. Consequently these strata have not been produced by land floods, at different and at distant periods. They direct our attention to one epoch, and most distinctly give us a measure, by which to estimate the time which has elapsed since either the elevation of our present continents, or the depression of the surrounding seas.'

We are assured, that the incursions of the ocean over the habitable surface of the earth took place at a time since it was actually inhabited by land animals, by the organic remains which the alluvions contain; and this remark leads us to our author's disquisition on the interesting subject of extraneous fossils, with which we shall close our observations. Mr. Townsend is the first who has given us any extensive account of the organic remains, in connexion with the strata to which they belong; and in this respect he has rendered great service to the public. The oldest class of rocks contain no vestiges of organised beings, and this fact is sufficient to silence the assertion of Hutton, that the world exhibits no traces of a beginning. Lithophytes and shells occur in the oldest secondary rocks, and more complicated beings gradually make their appearance. All these, however, and indeed all the organic remains occurring in strata which have never been disturbed and disintegrated, may be termed indigenous. It is plain, that the creatures of which they are the spoils lived and died on the places where they are here traced. The shells are found deposited according to families, and confined in a great measure each to its own stratum; and a similar remark applies to other animal remains of this department. It is not so with those of alluvial ground. These are assembled from all parts of the earth, and are thrown together in promiscuous heaps. In the same beds are found shells and corals only known in the Pacific Ocean, and the bones of elephants and rhinoceroses. 'They seem,' says Mr. Townsend, 'to have been transported from distant climates, and to have been deposited in a tumultuous manner by some grand convulsion, which blended and buried terrene and submarine productions, ancient and recent, in one common grave. The direction in which they have been conveyed, appears to have been from south-east to north-west. Hence, where we have an opportunity of making distinctions respecting their natural habitations, as in the Asiatic and African elephants, it is remarkable that the former, and not the latter, are to be found fossil in the north of Europe. Should the latter have been transported from their native seats by the same convulsion, it is probable that their relics have been deposited in the Atlantic Ocean.'

On the whole, though the arrangment of the author's materials might have been improved in this work, he has added considerably both to the stores of natural history, and to the elucidation and confirmation of the details of the sacred volume on this subject.

DELU'SION, *n. s.* } Lat. *delusio*. See DE-
DELU'SIVE, *adj.* } LUDE. A cheat, a false-
DELU'SORY. } hood; the act of cheating or deluding: the adjectives alike mean apt to deceive.

Yea, they have chosen their own ways, and their soul delighteth in their abominations. I also will chuse their *delusions*. *Bible. Isaiah* lxvi.

Who therefore seeks in these
True wisdom, finds her not, or by *delusion*.
Milton.

This confidence is founded on no better foundation than a *delusory* prejudice. *Glanville.*

Phænomena so *delusory* that it is very hard to escape imposition and mistake. *Woodward.*

I waking, viewed with grief the rising sun,
And fondly mourned the dear *delusion* gone.
Prior.

While the base and grovelling multitude were listening to the *delusive* deities, those of a more erect aspect and exalted spirit separated themselves from the rest. *Tatler.* No. 81.

Why will any man be so impertinently officious as to tell me all prospect of a future state is only fancy and *delusion*? Is there any merit in being the messenger of ill news? If it is a dream, let me enjoy it, since it makes me both the happier and better man.
Addison.

Unnumbered suppliants crowd preferment's gate,
Athirst for wealth, and burning to be great;
Delusive fortune hears the incessant call,
They mount, they shine, evaporate, and fall.
Johnson. Vanity of Human Wishes.

Can we persist to bid your sorrows flow
For fabled sufferers, and *delusive* woe? *Sheridan.*

DE'MAGOGUE, *n. s.* Gr. δημαγωγος. A ringleader of the rabble; a popular and factious orator.

Who were the chief *demagogues* and patrons of tumults, to send for them, to flatter and embolden them?
King Charles.

A plausible, insignificant word, in the mouth of an expert *demagogue*, is a dangerous and dreadful weapon. *South.*

Demosthenes and Cicero, though each of them a leader, or, as the Greeks called it, a *demagogue*, in a popular state, yet seem to differ in their practice.
Swift.

DEMA'IN, *n. s.* } Old Fr. *demesne*; Fr. *do-*
DEME'AN. } *maine*; both probably from
DEME'SNE. } Lat. *dominus*. That land which a man holds originally of himself, called dominium by the civilians, and opposed to feodum or fee, which signifies those that are held of a superior lord. It is sometimes used also for a distinction between those lands that the lord of the manor has in his own hands, or in the hands of his lessee, demised or let upon a rent for a term of years or life, and such other lands appertaining to the said manor as belong to free or copyholders. Estate in land, or land adjoining a mansion, in which sense demesne has been thought to come from old Fr. *mesne*, and Lat. *mansio*.

Having now provided
A gentleman of noble parentage,
Of fair *demesnes*, youthful, and nobly allied.
Shakspeare.

That earldom indeed had a royal jurisdiction and seigniory, though the lands of that county in *demesne* were possessed for the most part by the ancient inheritors. *Davies.*

Those acts for planting forest trees have hitherto been wholly ineffectual, except about the *demesnes* of a few gentlemen; and even there, in general, very unskilfully made. *Swift.*

DEMA'ND, *v. a.* & *n. s.* } Fr. *demander*;
DEMA'NDABLE, *adj.* } Span. and Portug.
DEMA'NDANT, *n. s.* } *demandár*; Ital. *de-*
DEMA'NDER. } *mandare*; Lat. *de-*
mando, from *de* and *mando* (*manu do*, to give with the hand). To claim; ask for as one's own previously, or with authority; hence to question, interrogate. As a substantive it is the claim made; the amount of it in money; an application made for any thing at its price: demandable, that which is due: demandant and demander, he who requires his alleged due by law or otherwise.

And when Uriah was come unto him, David *demanded* of him how Joab did, and how the people did, and how the war prospered. 2 *Sam.* xi. 7.

This matter is by the decree of the watchers, and the *demand* by the word of the holy ones.
Dan. iv. 17.

All sums *demandable*, for licence of alienation to be made of lands holden in chief, have been stayed in the way to the hanaper. *Bacon.*

The pound of flesh which I *demand* of him,
Is dearly bought; 'tis mine, and I will have it.
Shakspeare.

Young one,
Inform us of thy fortunes; for, it seems,
They crave to be *demanded*. *Id.*

They grow very fast and fat, which also bettereth their taste, and delivereth them to the *demander's* ready use at all seasons. *Carew.*

The oracle of Apollo being *demanded*, when the war and misery of Greece should have an end, replied, When they would double the altar in Delos, which was of a cubick form. *Peacham on Geometry.*

Giving vent, gives life and strength to our appetites; and he that has the confidence to turn his wishes into *demands*, will be but a little way from thinking he ought to obtain them. *Locke.*

My bookseller tells me, the *demand* for those my papers increases daily. *Addison.*

One of the witnesses deposed, that dining on a Sunday with the *demandant*, whose wife had sat below the squire's lady at church, she the said wife dropped some expressions, as if she thought her husband ought to be knighted. *Spectator.*

There are two manners of *demands*, the one of deed, the other in law: in deed, as in every præcipe, there is express *demand*; in law, as every entry in land distress for rent, taking or seizing of goods, and such like acts, which may be done without any words, are *demands* in law. *Blount.*

But the misery of it is, men will not think; will not employ their thoughts, in good earnest, about the things which most of all deserve and *demand* them.
Mason.

Every man has frequent occasion to state a contract, or *demand* a debt, or make a narrative of minute incidents of common life. *Johnson.*

Thus for short sins short hours of penance flow,
But heavier guilt *demands* more lasting woe.
Dr. T. Brown.

DEMBEA, a large lake of Abyssinia, is in the heart of the country, and supposed to be about 450 miles in circumference. It contains many islands, particularly one of great size, which is made a place of confinement. The great river Bahr-el-Azrek, so often supposed to be the true Nile, falls into it on the west, and issues from it on the south-west: it is said that the stream may be distinguished through the whole of its passage. Various small streams also fall into it.

DEMBEA, a province of Abyssinia, surrounding the great lake of that name. On the north it comprehends that fertile tract of which Gondar is the capital. On the east it includes Foggora, Dara, and Alata; and on the west, the lands about Waindaga and Dingleber. The whole region is fruitful, and finely varied by mountains and plains.

DEMEAN', *v. a.* & *n. s.* } Fr. *mener*; Ital.
DEMEANOUR. } *menare*; Norm. Fr. *demesner*; whence, thinks Mr. Todd, our word manage, i. e. conduct, carriage, demeanour: perhaps the whole, we might add, from Lat. *manus*, the hand. To behave; generally to carry one's self in a particular way. There seems to be no good authority for using it for debase. Dr. Johnson's instance from Shakspeare, and Mr. Todd's from Doddridge, are equivocal; but the reader will judge.

At his feet with sorrowful *demean*,
And deadly hue, an armed corse did lie.
Spenser.

Now, out of doubt, Antipholis is mad,
Else he would never so *demean* himself.
Shakspeare.

Angels best like us, when we are most like unto them, in all parts of decent *demeanour*. *Hooker.*

His gestures fierce
He marked, and mad *demeanour*, then alone,
As he supposed, all unobserved, unseen.
Milton.

He was of a courage not to be daunted, which was manifested in all his actions, especially in his whole *demeanour* at Rhee, both at the landing and upon the retreat. *Clarendon.*

Those plain and legible lines of duty requiring us to *demean* ourselves to God humbly and devoutly, to our governors obediently, and to our neighbours justly, and to ourselves soberly and temperately. *South.*

Of so insupportable a pride he was, that where his deeds might well stir envy, his *demeanour* did rather breed disdain. *Sidney.*

A man cannot doubt but that there is a God; and that, according as he *demeans* himself towards him, he will make him happy or miserable for ever. *Tillotson.*

Strephon had long perplexed his brains,
How with so high a nymph he might
Demean himself the wedding night. *Swift.*

That brow in furrowed lines had fixed at last,
And spake of passions, but of passions past;
The pride, but not the fire, of early days,
Coldness of mean, and carelessness of praise;
A high *demeanour*, and a glance that took
Their thoughts from others by a single look. *Byron.*

Peter was so affected at his condescending to perform such a mean office, that he says to him, It is a thousand times fitter that I should wash thine, nor can I bear to see thee thus *demean* thyself. *Doddridge's Expositor.*

DEME'NTATE, *v. a.* } Lat. *demento*, of *de*
DEMENTA'TION, *n. s.* } and *mens*, the mind. To make mad. Making mad, or frantic.

DEMERARA, or DEMERARA AND ESSEQUIBO, a colony of Great Britain, in the north-eastern part of South America. It is composed of two governments, named as above, both which, having been finally confirmed to Great Britain by the peace of 1814, are now one united colony. They form a part of what was originally Dutch Guienne; but the king of the Netherlands only retains, in this part of the world, the colony of Surinam. The general features and natural history of this country have been described already in our article AMERICA, SOUTH, par. 206—220. Demerara is bounded on the north by the Atlantic Ocean, on the east by a line drawn from the mouth of Albany Creek, in a south-east direction, dividing it from the British colony of Berbice, on the west by the river Pomaron, which divides it from Spanish Guiana; its southern boundary is undetermined. Staebroek, the only considerable town, and the seat of government, is in lat. 6° 46′ N., and long. 57° 45′ W. from London.

The whole country is low and swampy: on the coast the tides rise to the height of from sixteen to twenty-four feet. The rivers are the Essequibo, Demerara, and Canji or Cayonny, the last being supposed to communicate with the Oronoco. The Demerara River has a bar across its mouth, which prevents ships of large burden passing it; but vessels drawing fourteen feet may be loaded at Staebroek. Here are convenient wharfs: no large vessels, however, can lie near them, on account of the declivity of the bank, but are compelled to load and unload their cargoes in the middle of a rapid stream. The Essequibo is easily entered by the largest ships, but they must also be loaded and unloaded in the stream, as the same causes prevent their lying near shore.

We have also noticed the political history of these settlements. It is only necessary to add, that while, under the British government, the general internal policy is improved, and the roads, drainage, &c., have assumed a very different aspect to that which they bore in former times, the curse of an extensive dependence on slave-cultivation is no where more evident. Coffee, sugar, and cotton, are the staple articles of produce, and no where on earth is a finer soil presented to the hand of man. It has been transported to other of our western possessions as manure, and has been known to produce thirty crops of rattoon canes in succession, without replanting. Sometimes it has been cropped two or three years with plantains, to reduce its excessive richness, and afterwards with sugar canes; but the first, second, and sometimes even the third crop, has been so luxuriant as to be only fit to make rum. Each estate is intersected with dikes and trenches, communicating with the river, by means of which, in small flat-bottomed boats, the whole conveyance of the produce is effected from one part of the estate to another. Thus they carry the canes from the field to the sugar-mill and the still-house. The earth removed to form these ditches is thrown on beds, which contain the cotton-trees planted in rows six feet asunder. The coffee-trees are planted in rows from nine to twelve feet apart, and the intermediate spaces are filled either by plantain-trees, or the bois immortel, growing to the height of twelve or fourteen feet, and affording a welcome shade to the coffee plants.

In the colony are from 60,000 to 65,000 slaves kept in awe with difficulty, and in no small degree by the strong aversion that subsists between them and the aboriginal Indians of the interior, who readily bring back all stragglers to their masters, and often assist in suppressing insubordination. The colony is governed by the Dutch laws. The free inhabitants do not exceed 3000.

DEME'RIT, *n. s.* Fr. *demerite*; from *demeritus*, Lat. of *demereor*. See MERIT. Blame.

They should not be able once to stir, or to murmur, but it should be known, and they shortened according to their *demerits*. *Spenser on Ireland.*

I fetch my life and being
From men of royal siege; and my *demerits*
May speak, unbonnetting, to as proud a fortune
As this that I have reached. *Shakspeare. Othello.*

Thou livest by me, to me thy breath resign;
Mine is the merit; the *demerit* thine. *Dryden.*

Whatever they acquire by their industry or ingenuity, should be secure, unless forfeited by any *demerit* or offence against the custom of the family. *Temple.*

I considered the possession of it [a bishopric] as a frequent occasion of personal *demerit*; for I saw the generality of the bishops bartering their independence and the dignity of their order for the chance of a translation, and polluting gospel-humility by the pride of prelacy. *Bp. Watson.*

DEME'RSED, *part.* } From *demersus*, or *de-*
DEME'RSION, *n. s.* } *mergo*, Lat. Plunged; drowned. A drowning. In chemistry, the putting any medicine in a dissolving liquor.

DEME'SNE. See DEMAIN.

DEMETRIUS I., surnamed Poliorcetes, destroyer of towns, was the son of Antigonus. At the age of twenty-two he was sent by his father against Ptolemy, who invaded Syria. He was defeated near Gaza, but soon repaired his loss by

a victory over one of the generals of the enemy. He afterwards sailed with a fleet of 250 ships to Athens, and restored the Athenians to liberty, by freeing them from the power of Cassander and Ptolemy, and expelling the garrison, which was stationed there under Demetrius Phalereus. After this successful expedition, he besieged and took Munychia, and defeated Cassander at Thermopylæ His reception at Athens after these victories was attended with the most servile flattery; and the Athenians were not ashamed to raise altars to him as to a god, and consult his oracles. This raised the jealousy of the successors of Alexander; and Seleucus, Cassander, and Lysimachus united to destroy Antigonus and his son. Their hostile armies met at Ipsus, A. A. C. 301: Antigonus was killed in the battle; and Demetrius, after a severe loss, retired to Ephesus. The Athenians, who had lately adored him as a god, refused to admit him into their city; but he soon after ravaged the territory of Lysimachus, and reconciled himself to Seleucus, to whom he gave his daughter Stratonice in marriage. Athens now labored under tyranny, and Demetrius relieved it a second time, and pardoned the inhabitants. The loss of his possessions in Asia recalled him from Greece, and he established himself on the throne of Macedonia. Here he was continually at war with the neighbouring states, and the superior power of his adversaries obliged him to leave his kingdom, after he had sat on the throne for seven years. He passed into Asia, and attacked some of the provinces of Lysimachus with various success; but famine and pestilence having destroyed the greatest part of his army, he applied to Seleucus for assistance. He, at first, met with a kind reception, but hostilities were again soon begun; and, though he gained some advantages over his son-in-law, he was at last forsaken by his troops, and taken prisoner. Though Seleucus kept him in confinement, he maintained him like a prince, and he passed his time in hunting, and in other laborious exercises. His son Antigonus offered Seleucus all his possessions, and even his person, to procure his father's liberty, but in vain, and Demetrius died in the fifty-fourth year of his age, after a confinement of three years, A. A. C. 286. His remains were given to Antigonus, and honored with a splendid funeral at Corinth, and thence conveyed to Demetrias.

Demetrius I., king of Syria, surnamed Soter, or Saviour, was son of Seleucus Philopater. Being a hostage at Rome, when his father died, his uncle, Antiochus Epiphanes, usurped the kingdom, and was succeeded by his son Antiochus Eupator. Demetrius at last procured his liberty on pretence of going to hunt, and fled to Syria, where the troops received him as their lawful sovereign. He put to death Eupator and Lysias, but, endeavouring to establish himself on his throne by cruelty and oppression, Alexander Bala, the pretended son of Antiochus Epiphanes, claimed the crown, and defeated Demetrius in a battle, A. A. C. 150.

Demetrius, the disciple of Apollonius Tyanæus, a cynic philosopher of the age of Caligula. The emperor wished to gain him to his interest by a large present; but Demetrius refused it with indignation, and said, If Caligula wishes to bribe me, let him send me his crown. Vespasian was displeased with his insolence, and banished him to an island. The cynic derided the punishment, and satirised the emperor. He died in an extreme old age; and Seneca observes, that 'nature had brought him forth to show mankind, that an exalted genius can live securely without being corrupted by the vices of the surrounding world.'

Demetrius Phalereus, a celebrated orator and peripatetic philosopher, was the scholar of Theophrastus. He acquired so much authority at Athens, that he governed the city for ten years; and he ruled with so much wisdom and virtue, that thirty-six statues were erected in honor of him. Being obnoxious, however, to the aristocratical party, they procured an order for his death; but, he escaped into Egypt, and was protected by Ptolemy Lagus. On the death of that prince he was banished by his successor. None of the works of this celebrated philosopher are extant, except his Rhetoric, which is usually printed among the Rhetores Selecti.

Demetrius, czar of Russia, commonly called the false Demetrius, was, according to most authors, a native of Jaroslaw, and a novice in a monastery, where he was instructed by an old monk to personate Demetrius, son of the czar John Basilovitz, who had been murdered by Boris Gudenov, in 1597. The youth, according to his instructions, went under the name of Demetrius, and pretended to have escaped from his murderers into Lithuania, where he was taken into the service of a nobleman named Wicnovitski, to whom he told his story, and who espoused his cause. When Boris heard of this rival, he sent assassins to despatch him; but his patron being warned of it conveyed him to Mnieski, palatine of Sandomir, who promised to assist him in his design on the Russian throne, provided he would embrace the Roman Catholic religion, which he readily consented to, and was married to the palatine's daughter. Assisted by the Poles, Demetrius, in 1604, marched into Russia, at the head of a small army, and was soon joined by a number of Russians and Cossacs. He defeated an army sent against him, and an insurrection took place in his favor. On the death of Boris, the people strangled his son and placed Demetrius on the throne; but his partiality to the Poles and contempt of the Greek religion occasioned an insurrection, and he was murdered in 1606, after a short reign of about eleven months. Mr. Archdeacon Coxe, contrary to the generality of writers, considers him to have been the true prince Demetrius.

DEMI Attici, in ancient history, boroughs or large villages of Attica. The Athenian tribes were distributed into Demi. Homer, in his catalogue, distinguishes the Athenians by the appellation Demos. And when Theseus prevailed on them to quit the country of Attica, and settle at Athens, they still continued to frequent the Demi, and to perform their religious ceremonies there.

DEMI-CANNON, *n. s.* From demi, half, and cannon. An ancient piece of artillery, carrying a thirty-six pound ball.

What! this a sleeve, 'tis like a *demi-cannon*.
Shakspeare.

Ten engines, that shall be of equal force either to a cannon or *demi-cannon*, culverin or demi-culverin, may be framed at the same price that one of these will amount to. *Wilkins.*

DEMI-CULVERIN. An old piece of ordnance carrying a thirteen pound ball.

They continue a perpetual volley of *demi-culverins*.
Raleigh.

The army left two *demi-culverins*, and two other good guns. *Clarendon.*

DEMI-DEVIL. From demi and devil. Partaking of infernal nature; half a devil.

Will you, I pray, demand that *demi-devil*,
Why he hath thus ensnared my soul and body?
Shakspeare. Othello.

DEMI-GOD, *n. s.* From demi and god. Partaking of a divine nature; half a god; a hero produced by the cohabitation of divinities with mortals. See HERO.

He took his leave of them, whose eyes bade him farewell with tears, making temples to him as to a *demi-god*. *Sidney.*

Be gods, or angels, *demi-gods*. *Milton.*

Transported *demi-gods* stood round,
And men grew heroes at the sound,
Inflamed with glory's charms. *Pope.*

Nay, half in heaven, except (what's mighty odd)
A fit of vapours clouds this *demi-god*. *Id.*

Who is this?
Who truly looketh like a *demi-god*,
Blooming and bright, with golden hair, and stature,
If not more high than mortal, yet immortal.
Byron.

DEMI-GORGE, in fortification, is that part of the polygon which remains after the flank is raised, and goes from the curtain to the angle of the polygon. It is half of the vacant space or entrance into a bastion.

DEMI-LANCE, *n. s.* From demi and lance. A light lance; a short spear; a half pike.

On their steeled heads their *demi-lances* wore
Small pennons, which their ladies colours bore.
Dryden.

Light *demi-lances* from afar they throw,
Fastened with leathern thongs, to gall the foe.
Id.

DEMI-MAN, *n. s.* From demi and man. Half a man; a term of reproach.

We must adventure this battle, lest we perish by the complaints of this barking *demi-man*. *Knolles.*

DEMIS'E, *v. a.* & *n. s.* Fr. *demis*; Lat. *demitto, demisi*, to hand down. (*de* and *mitto*, Gr. $\mu\epsilon\theta\iota\eta\mu\iota$). Applied to handing down by legacy or death: and, as a substantive, to death itself, by which the crown of a monarchy is generally transmitted.

Inexorable vigour is worse than a lasche *demission* of sovereign authority. *L'Estrange.*

About a month before the *demise* of queen Anne, the author retired. *Swift.*

My executors shall not have power to *demise* my lands to be purchased. *Swift's Last Will.*

DEMISE, in law, is applied to an estate either in fee simple, fee-tail, or for a term of life or years; and so it is commonly taken in many writs.

DEMISE, and RE-DEMISE, denote a conveyance where there are mutual leases made from one to another of the same land, or something out of it.

DEMI-SEMI-QUAVER, in music, the shortest note, two of them being equal to a semiquaver.

DEMIT, *v. a.* Lat. *demitto*. See DEMISE. To depress; to hang down; to let fall.

When they are in their pride, that is, advancing their train, if they decline their neck to the ground, they presently *demit* and let fall the same.
Browne's Vulgar Errours.

DEMI-WOLF, *n. s.* From demi and wolf. Half a wolf; a mongrel dog between a dog and wolf.

Spaniels, curs,
Showgas, water-rugs, and *demi-wolves*, are 'cleped
All by the name of dogs. *Shakspeare. Macbeth.*

DEMO'CRACY, *n. s.* } Fr. *democratie*;
DEM'OCRAT, } Spanish *democracia*,
DEMOCRATIC, *n. s.* } from Gr. $\delta\eta\mu o\kappa\rho\alpha\tau\iota\alpha$ ($\delta\eta\mu o\varsigma$ the people, and $\kappa\rho\alpha\tau\epsilon\omega$ to govern). A government by the people at large. A democrat is an advocate or partizan of democracy. The old word democratic is only more agreeable to the etymology.

Thence to the famous orators repair,
Those ancient, whose resistless eloquence
Wielded at will that fierce *democratic*,
Shook the arsenal and fulmined over Greece.
Milton.

They are still within the line of vulgarity, and are *democratical* enemies to truth.
Browne's Vulgar Errours.

While many of the servants, by industry and virtue, arrive at riches and esteem, then the nature of the government inclines to a *democracy*. *Temple.*

The majority, having the whole power of the community, may employ all that power in making laws, and executing those laws; and there the form of the government is a perfect *democracy*. *Locke.*

As the government of England has a mixture of *democratical* in it, so the right is partly in the people.
Arbuthnot.

DEMOCRITUS, one of the greatest philosophers of antiquity, was born in Abdera, in Thrace, about the 80th Olympiad, or A.A.C. 466. His father, says Valerius Maximus, was able to entertain the army of Xerxes; and Diogenes Laertius adds, that the king, in return, presented him with some Magi and Chaldeans. From these he received the first part of is education; and, whilst yet a boy, learned theology and astronomy. He next applied to Leucippus, and learned from him the systems of atoms and a vacuum. His father dying, he and his two brothers divided the estate. Democritus made choice of that part which consisted of money, as being, though the least share, the most convenient for travelling; and it is said, that his portion amounted to 100 talents, which is nearly £20,000 sterling. He now went to visit the priests of Egypt, from whom he learned geometry: and it is said, that he penetrated even into India and Ethiopia, to confer with the Gymnosophists. In these travels he wasted his substance, so that on his return he was maintained by his brother; notwithstanding which, he procured the highest honors of his country,

which he governed with unlimited sway and consummate wisdom. The magistrates of Abdera made him a present of 500 talents, and erected statues to him, even in his lifetime; but, being naturally more inclined to contemplation than delighted with public honors and employments, he withdrew into solitude and retirement. He incessantly laughed at human life, as a continued farce, which made the inhabitants of Abdera think he was mad, on which they sent for Hippocrates to cure him; but that celebrated physician told the Abderians, that those who esteemed themselves the most healthy were the most distempered. Democritus died, according to Diogenes Laertius, aged 100, A.A.C. 361. He was the author of many books, which are lost; and from these Epicurus borrowed his philosophy.

DEMOIVRE (Abraham), an eminent French mathematician, F.R.S. London, was a native of Vitri, in Champagne, and driven from his native country, as a Protestant, by the revocation of the edict of Nantes. He settled in London as a teacher of mathematics, and was particularly celebrated for his skill and accuracy as a calculator, for which he is referred to by Pope:

Sure as Demoivre, without rule or line.

He died in 1754, at the age of eighty-six. His works are, Miscellanea Analytica, 4to.; The Doctrine of Chances, or a Method of Calculating the Probabilities of Events at Play, 4to.; and a work on Annuities; besides papers in the Transactions of the Royal Society.

DEMO'LISH, *v. a.* DEMO'LISHER, *n. s.* DEMOLI'TION. Fr. *demolir*; from Lat. *demolari*, i. e. *de* and *molior* (*moles*, a mass). To destroy a building; hence to destroy generally.

Notwithstanding which, it is now *demolished*, and all this glory lyeth in the dust, buried in its own ruins; there being nothing standing but a few broken walls, which seem to mourn their own approaching funerals. *Fuller. Worthies of Devon.*

I expected the fabrick of my book would long since have been *demolished*, and laid even with the ground. *Tillotson.*

Red lightning played along the firmament,
And their *demolished* works to pieces rent.
Dryden.

Two gentlemen should have the direction in the *demolition* of Dunkirk. *Swift.*

The damsel led him thro' a spacious hall,
Where ivy hung the half-*demolished* wall. *Gay*

The first care of the builder of a new system is to *demolish* the fabrics which are standing. *Johnson.*

The professor of divinity had been nick-named Malleus Hæreticorum; it was thought to be his duty to *demolish* every opinion which militated against what is called the orthodoxy of the Church of England. *Bp. Watson.*

DE'MON, *n. s.* DEMO'NIAC, *n. s.* & *adj.* DEMONI'ACAL, *adj.* DEMO'NIAN, *adj.* Fr. *demón*; Ital. from Lat. *dæmon*; δαιμων, δαω, δαημων, knowing. An inferior deity; a devil; generally used in a bad sense.

Demonian spirits now, from the element
Each of his reign allotted, rightlier called
Powers of fire, air, water. *Milton.*

Demoniack phrensy, moping melancholy. *Id.*

I felt him strike, and now I see him fly:
Cursed *demon!* O for ever broken lie
Those fatal shafts, by which I inward bleed!
Prior.

Those lunaticks and *demoniacks* that were restored to their right mind, were such as sought after him, and believed in him. *Bentley.*

But ah! those dreadful yells what soul can hear,
That owns a carcase, and not quake for fear?
Dæmons produce them doubtless, brazen-clawed,
And fanged with brass the *dæmons* are abroad.
Cowper.

I said not
You were the *demon*, but that your approach
Was like one. *Byron.*

DEMONA, Val, a province of Sicily, which occupies the north-east portion of the island, extending from the strait of Messina to Catania, and having the Val de Mazzara to the west, and Val de Noto to the south. Its greatest width is sixty-five miles, the length 112. To it belong the Lipari and other islands. The population is about 521,000. It is mountainous and woody, being fertile only on the banks of the rivers. The chief productions are silk, hemp, flax, olives, lemons, oranges, figs, and currants; but sulphur abounds in the neighbourhood of Mount Ætna. The atmosphere is here cool and humid. The capital is Messina; the other chief towns are Melazzo, Cefalu, and Taormina.

DEMONO'CRACY, *n. s.* Δαίμων and κρατέω. The power of the devil.

DEMONO'LATRY, *n. s.* Δαίμων and λατρεια. The worship of the devil.

DEMONO'LOGY, *n. s.* Δαίμων and λόγος. Discourse of the nature of devils. Thus king James entitled his book concerning witches.

DEMON'STRATE, *v. a.* DEMON'STRABLE, *adj.* DEMON'STRABLY, *adv.* DEMONSTRA'TION, *n. s.* DEMON'STRATIVE, *adj.* DEMON'STRATIVELY, *adv.* DEMONSTRA'TOR, *n. s.* DEMONSTRAT'ORY, *adj.* Fr. *demonstrer*; Span. *demostrar*, *dimostrare*; from Lat. *demonstrare*, *de*, and *monstro*, to show. To prove with certainty; to exhibit facts: demonstrable is that which may be proved or exhibited: demonstration, the highest degree of proof; indubitable evidence: demonstrative, having the power of indubitable proof, or of clear expression. Demonstratory, having a tendency to demonstrate. The other derivatives seem plain.

An argument necessary and *demonstrative*, is such as, being proposed unto any man, and understood, the man cannot choose but inwardly yield. *Hooker.*

What appeareth to be true by strong and invincible *demonstration*, such as wherein it is not by any way possible to be deceived, thereunto the mind doth necessarily yield. *Id.*

Where is a probability on one side, and no appearance of reason to the contrary; that probability does the work of a *demonstration*. *Bishop Taylor.*

He should have compelled his ministers to execute the law, in cases that *demonstrably* concerned the publick peace. *Clarendon.*

Demonstratively understanding the simplicity of perfection, it was not in the power of earth to work them from it. *Browne.*

The total amount of the sum assessed to the property-tax in 1815, was £243,876. Its principal rivers are the Clwyd, Conway, Dee, and Elway; the first traversing the vale of that name; the Conway is the boundary between this county and Carnarvonshire. The Ellesmere canal passes through the southern part of the county. The vale of Clwyd, stretches about twenty miles towards the sea, and exhibits a number of gentlemen's seats, villages, and imposing objects. The western part of the county is mountainous, interspersed with some small lakes and vales. The northern part, towards the sea, is more level. In the central parts of the hundred of Isaled are many bleak and barren hills. Yale is a hilly region, covered with heath, and an excellent cover for grouse. Though the air is sharp on the hills, the climate of Denbighshire is considered salubrious, and the inhabitants are remarkable for a brightness of complexion, and cheerful healthy countenances. Veins of lead and iron ore have been found in this county, and coal mines have been opened. Slate is also met with in the southern parts, and limestone is abundant. The chief agricultural products are grain, cattle, and cheese. Its manufactures are coarse cloth, flannel, and cotton twist.

The improvements of its agriculture of late years have been very decided, and have been in no small degree connected with the munificent patronage bestowed on that important pursuit by Sir Watkins William Wynne, who distributes annual prizes for superior cattle and sheep at his elegant modern seat of Wynnstay. The sheep are of the light-horned breed, yielding the wool manufactured here; and the goats are no where finer in their hair. The cattle are of a low, black breed. Ruthin derives its name from a castle called Rhyddin, or Red Fortress, from the color of the stone, and which was probably erected by Edward I. During the civil wars it was garrisoned by the royalists, till about the middle of April 1646, when it was compelled to surrender, after sustaining a siege of two months. After this it was demolished by order of parliament, and a few fragments of walls only remain to denote its site, and its large dimensions. Wrexham Church, once collegiate, is amongst the chief ornaments of the principality, and was erected about the year 1472; but the tower does not appear to have been finished till 1506. It exhibits a beautiful specimen of the chaste decorations of Henry VII.'s age. There are the remains of a castle at Chirk, on the line of Offa's dike, and another at Holt, built in the reign of Edward I. by earl Warren.

The inhabitants retain their full portion of the manners and superstitions of ancient Wales: they have bidders to invite the neighbours to a wedding, and several interesting modes of expressing their affection for their deceased friends. The corpse is brought out of the house, and placed amidst the surrounding relations on a bier, while the nearest relation distributes bread, cheese, and beer to poor persons of the same sex and age as the deceased. All now kneel down, and the minister repeats the Lord's Prayer. They stop at every cross-way to the grave, and repeat the same ceremony. The graves are every where planted with evergreens and flowers.

DENBIGH, the county town of Denbighshire, stands at the foot of a craggy hill, near the middle of the vale of Clwyd. It was called by the Britons Cledfryn yn Rhos, i. e. the craggy hill in Rhos, and has at present so far diverged from its ancient site, that the parish church and burial-ground are full a mile from the bottom of the vale: the inhabitants, therefore, use the chapel of St. Hilary, near the castle, as a place of worship. The town was formerly surrounded with a strong wall. On the summit of a high rock, above the town, are the ruins of a castle, sometimes said to be built by Lacy, earl of Lincoln, and by other writers to be of British foundation. It was delivered up to the parliamentary army, in 1646, and demolished at the Restoration. The prospect along the Clwyd, from this elevation, is delightful. Denbigh is a borough, governed by two aldermen, a recorder, two bailiffs acting as sheriffs, and a common council of twenty-five capital burgesses. It joins with Ruthin and Holt in sending one member to parliament, the number of voters here being about 500, and the bailiffs the returning officers. At the lower end of the town, in the parish of Henllan, stood a priory of white friars or Carmelites, once a very picturesque object; but little remains that is now to be seen. It was founded in 1201. Market on Wednesday. 205 miles north-west from London.

DENDERA, a town of Egypt, on the west side of the Nile, at the edge of a small, but fertile plain, about half a mile from the river. Near the town are remarkably magnificent ruins, supposed of an ancient temple of Serapis, or Venus. The portico contains twenty-four columns, in three rows, each above twenty-two feet in circumference, thirty-two feet high, and covered with hieroglyphics. The great peculiarity consists in the square capitals, with a front face of Isis on each side, the effect of which, though singular, is by no means unpleasing. All the walls and ceilings of the interior are covered with sculptures, which display the highest perfection of Egyptian art. They have originally been covered with paint, the brilliant colors of which partially remain. The subjects are various; religious ceremonies, priests, offerings, deities, and human sacrifices. Isis, with Osiris behind her, forms the grand theme of representation. There are also numerous astronomical figures on the ceilings; of these two zodiacs have, in a particular degree, attracted the attention of the learned, who have been much divided as to the date when they were formed. De la Lande would fix their period at 3000 years ago, or 1200 before the Christian era; but Mr. Hamilton is disposed to consider them as much more modern, and as probably formed in the reign of Tiberius. By the side of the great temple is a smaller one, supposed to have been dedicated to Typhon, whose figure is displayed on the capitals; but the chief object of adoration seems to be an infant figure, in which may be distinguished the attitude and character of the young Harpocrates. Mr. Hamilton is of opinion, that several of those structures may have been raised in the time of the Ptolemies; and the names of Tiberius and other Roman emperors, which he found in the inscrip-

tions, prove that repairs were made at that period. The whole of these edifices, with the exception of one propylon, is contained within a square of 1000 feet, surrounded by a brick wall. Within the enclosure, a great number of modern buildings have been erected, so as often to hide them entirely from view.

Dr. Richardson, one of our latest travellers in the east, thus describes this spot: 'The scene of ruins is nearly a mile square, and consists of houses of unburnt brick, that have been repeatedly overturned, and at every restoration, the new houses have been built on the top. The first thing that attracts the eye of the traveller, on the edge of this black field of ruins, is a small square stone building, with four columns; it has an unfinished appearance, and is without hieroglyphics. It is difficult to say for what purpose this edifice was intended; it looks like a porter's lodge, or habitation for the guardian of the precincts of the temple: and I should not have mentioned it at all, had it not been constructed of the same species of sand-stone with the temple itself; and as these must have been brought thither from a great distance, and at a great expense, it is probable that this insignificant fabric was connected with it for religious purposes. Advancing from this, for several hundred yards among the brick ruins, we came to an elegant gateway, or propylon, which is also of sand-stone, well hewn, and completely covered with sculpture and hieroglyphics, remarkably well cut. Immediately over the centre of the doorway is the beautiful Egyptian ornament, usually called the globe, with serpent and wings, emblematic of the glorious sun poised in the airy firmament of heaven, supported and directed in his course by the eternal wisdom of the Deity. The sublime phraseology of Scripture, 'the sun of righteousness shall arise with healing in his wings,' could not be more accurately, or more emphatically represented to the human eye, than by this elegant device. To this succeed representations of Osiris, Isis, and their son Horus, with processions of priests and people advancing to pay their homage, and presenting their offerings on their knees. Passing under the gateway, we find the principal devices on each side of the passage to be the sceptre of Osiris alternating with a figure, representing the letter T, suspended by a handle; or, to speak more correctly, with a handle attached to it ☥; it has been called the handled cross, the key of the Nile, and is honored with other designations.' Vol. i. 185—187.

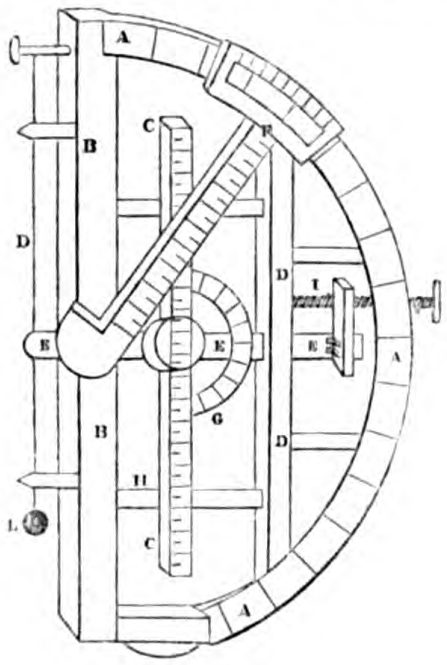
Dr. Richardson considers this as the sign, or letter Thau, mentioned in the Vulgate Latin version of Ezekiel ix. 4; and there intimated as being the sign of life and salvation to those who received it. Some of the female figures are admirably executed, and exhibit a remarkable mildness of feature and expression. The remains of three temples still exist. The largest of these is in a state of fine preservation, and is emphatically termed the temple of Dendera. It is minutely described by Dr. Richardson, whose account, as well as his disquisition on Egyptian deities, will not easily admit of abridgment. We only remark, that he controverts the commonly received opinion, that the splendid sculptures in the pro-naos, which have lately arrived at Paris, are a zodiac; and in this opinion he is supported by some eminent French literati. He had an opportunity of comparing the original with part of the great French work on Egypt; to the elegant execution of which he gives the just tribute of praise, but he announces it to be extremely incorrect in every part. It is 242 miles south of Cairo, and forty-eight S.S. E. of Girge.

DENDERMONDE, a handsome town of the Netherlands, with a strong citadel. It is surrounded by marshes and fine meadows, which the inhabitants can lay under water when they please, and seated at the conflux of the Dender and Scheldt, fourteen miles east of Ghent, and nineteen south-west of Antwerp. Inhabitants 5000. In 1667 the town was besieged by Louis XIV. with an army of 50,000 men, but he was obliged to retreat with precipitation, the inhabitants having opened the sluices. The vicinity is very fertile.

DENDRACHATES, in natural history, from *δενδρον*, a tree, and *αχατης*, an agate; the name used by the ancients for an extremely elegant and beautiful species of agate, the ground of which is whitish, variegated with veins of a brighter white. These veins are beautifully disposed in a number of various figures; but generally in many concentric irregular circles, drawn round one or more points. It is common also, in various parts of this stone, to find very beautiful delineations of trees, mosses, sea plants, and the like, so elegantly expressed, that many have erroneously taken them for real plants included in the substance of the stone; whence the name.

DENDROLOGY, *n. s.* *Δένδρόν* and *λογος*. The natural history of trees.

DENDROMETER, from *δενδρον*, a tree, and *μετρεω*, to measure; an instrument so called from its use in measuring trees. This instrument



consists of a semicircle A, divided into two quadrants, and graduated from the middle; upon the diameter B there hangs a plummet L for fixing the instrument in a vertical position; there is also a chord D parallel to the diameter, and a radius E, passing at right angles through the diameter and chord. From a point on the radius hangs an altimeter C, between the chord and diameter, to which is fixed a small semicircle G, and a screw, to confine it in any position. The altimeter, which is contrived to form the same angle with the radius of the instrument, as the tree forms with the horizon, is divided from its centre both ways into forty equal parts; and these parts are again subdivided into halves and quarters. Upon the small semicircle G, on which is accounted the quantity of the angle made by the altimeter and radius, are expressed degrees, and the radius is numbered with the same scale of divisions. There is also a nonius to the small semicircle, which shows the quantity of an angle to every five minutes. There is also a groove in the radius, that slides across the axis, by means of a screw I, working between the chord and semicircle of the instrument; and this screw is turned by the key O. The principal use of this instrument is for measuring the length and diameter of any tree, perpendicular or oblique, to an horizontal plane, or in any situation of the plane on which it rests, or of any figure, whether regular or irregular, and also the length and diameter of the boughs, by mere inspection.

DENDROPHORI, from δενδρον, a tree, and φερω, to bear; tree-bearers. In antiquity, priests who marched in procession, carrying branches of trees in their hands, in honor of some god, as Bacchus, Cybele, Sylvanus, &c. The college of the dendrophori is often mentioned in ancient marbles; and we frequently see, in basso relievos, the bacchanals, represented as men, carrying little shrubs or branches of trees.

DENHAM (Sir John), an eminent English poet, was born in Dublin in 1615; but he received his education in England. In 1641 he published a tragedy, called The Sophy, which was much admired; and, in 1643, wrote his famous poem called Cooper's Hill, which, according to Dryden, will ever be a standard of good writing. Denham was sent ambassador from Charles II. to the king of Poland; and at the Restoration was made surveyor-general of his buildings, and created knight of the Bath. On obtaining this post, he is said to have renounced his poetry for more important studies; though he afterwards wrote a copy of verses on the death of Cowley. He died at his office, in Whitehall, in 1668.

DENIAL, DENIER. See DENY.

DENIE'R, *n. s.* Lat. *denarius*. It is pronounced as *dencer*, in two syllables. A small denomination of French money; the twelfth part of a sous.

You will not pay for the glasses you have burst?
—— No, not a *denier*. *Shakspeare.*

DENIER is a small French copper coin, of which twelve make a sol. There are two kinds of deniers, the one Tournois, the other Parisois, the latter of which is worth a fourth part more than the former. Denier is also the name of a small weight, used in assaying silver. Like the carat, used in trying and expressing the fineness of gold, it is rather imaginary than real, as the whole mass of silver, whatever be its weight, is supposed to be divided into twelve deniers; and as many twelfth parts, as it contains of pure silver, it is called silver of so many deniers fine. Thus sterling silver, of eleven deniers fine, is a mixture, of which eleven parts are pure silver and one part copper. Each denier is supposed to be divided into twenty-four grains; and thus, estimating pure silver at 6*s.* per oz., an ounce of sterling silver is worth 5*s.* 6*d.*; and the fineness of any quantity of silver can be calculated with the utmost exactness to half a grain in purity, or half a farthing in value per oz. The deniers and grains, used by the assaymasters for this purpose, are real weights, made with the most scrupulous exactness in the above proportions to each other.

DE'NIGRATE, *v. a.* } Lat. *denigro*, from
DENIGRA'TION, *n. s.* } *de* and *nigro*. To blacken; to make black.

By suffering some impression from fire, bodies are casually or artificially *denigrated* in their natural complexion: thus are charcoals made black by an infection of their own suffitus.
Browne's Vulgar Errours.

These are the advenient and artificial ways of *denigration*, answerably whereto may be the natural progress. *Browne.*

Hartshorn, and other white bodies, will be *denigrated* by heat; yet camphire would not at all lose its whiteness. *Boyle.*

In several instances of *denigration*, the metals are worn off, or otherwise reduced into very minute parts. *Id.*

DEN'IZEN, or
DENIZON, *v. a.* & *n. s.*
DENIZA'TION, *n. s.* } Either, says Minsheu, from old Fr. *donaisson*, giving (liberty); or from Dane's son, the son of a Dane, according to Dr. Johnson, from the Danes being made free by Alfred. A freeman; a stranger made free; (the Welsh is *dinasddyn*, a man of the city; and *dinassydd*, free of the city). To make free.

Denizen is a British law term, which the Saxons and Angles found here and retained. *Davies.*

That the mere Irish were reputed aliens, appears by the charters of *denization*, which in all ages were purchased by them. *Id*

Pride, lust, covetize, being several
To these three places, yet all are in all;
Mingled thus, their issue is incestuous;
Falsehood is *denizened*, virtue is barbarous.
Donne.

Thus the' Almighty Sire began: Ye gods,
Natives, or *denizens*, of blest abodes,
From whence these murmurs? *Dryden.*

A great many plants will hardly, with nursing, be made to produce their seed out of their native soil; but corn, so necessary for all people, is fitted to grow and to seed as a free *denison* of the world. *Grew.*

He summons straight his *denizens* of air;
The lucid squadrons round the sails repair. *Pope.*

DENIZEN, in law, an alien made a subject by the king's letters patent; otherwise called donaison, because his legitimation proceeds ex

donatione regis, from the king's gift.' A denizen is in a kind of middle state between an alien and a natural-born subject, and partakes of both of them. He may take lands by purchase or devise, which an alien may not; but cannot take by inheritance: for his parent, through whom he must claim, being an alien, had no inheritable blood; and, therefore, could convey none to the son: and, upon a like defect of blood, the issue of a denizen, born before denization, cannot inherit to him; but his issue, born after, may. A denizen is not excused from paying the alien's duty, and some other mercantile burdens. And no denizen can be of the privy council, or either house of parliament, or have any office of trust, civil or military, or be capable of any grant of lands, &c. from the crown.

DENMAN (Dr. Thomas), an eminent physician and medical writer, was born at Bakewell, in Derbyshire, in 1733, where his father was a respectable apothecary; on whose death, he was, for some time, an assistant to his elder brother. He afterwards came to London, and attended at St. George's Hospital: he then entered the navy, as surgeon's mate, and in 1757, was made surgeon of a ship. In 1763 he quitted the navy, after having served in the expedition against Belleisle. His first publication was in London, An Essay on Puerperal Fever, which was well received; but his professional prospects were so little satisfactory, that he was happy to obtain the situation of surgeon to one of the royal yachts, which brought him in a salary of £70 a-year, without interrupting his practice. He was shortly after (1770) chosen joint-physician and man-midwife to the Middlesex Hospital, and gave lectures on the latter branch of practice. He thus slowly emerged from obscurity into the most extensive practice: was appointed licentiate in midwifery of the College of Physicians in 1783, and, six years after, an honorary fellow of the Royal Society of Edinburgh. After the death of Dr. William Hunter, he was considered as the most eminent obstetrical practitioner in the metropolis. His great work, is The Introduction to the Practice of Midwifery, which, with his Aphorisms for the Use of Junior Practitioners, claims a place in every medical library. In the decline of life, Dr. Denman relinquished the more laborious part of his practice to his son-in-law, Sir Richard Croft, and became a consulting physician. His death, which was sudden, took place November 26th, 1815.

DENMARK, one of the most ancient monarchies in Europe, comprehends the peninsula of Jutland, Sleswick, Holstein, and Lauenburg, on the continent; and the islands of Zealand, Funen, Langeland, Falster, Laaland, Bornholm, Moen, and several others in the Baltic. Denmark Proper is that part of Scandinavia which formerly went by the name of Cimbrica Chersonesus. It is every where bounded by the sea, except on its southern frontier in Holstein, and stretches northward from about 53° 30′ to 57° 30′ of lat., i. e. from the right bank of the Elbe, to the extreme point of Jutland. This main-land tract is divided into three divisions, of which Holstein forms the southern, Sleswick the central, and Jutland the northern province, each being governed by laws and institutions, occasionally very dissimilar; and contains, together with the adjacent islands, a territory of about 22,000 square miles, and a population of about 1,635,000 inhabitants, thus distributed:

Jutland contains . . .	400,000
Zealand (including Copenhagen), Funen, and other islands, .	550,000
Sleswick	300,000
Holstein	350,000
Lauenburgh . . .	35,000
	1,635,000

Iceland, the Faroe Islands, and the settlements of Denmark in the East and West Indies and Africa, are supposed to add about 155,000 more to the population in the following proportions:

Iceland	50,000
Faroe Isles	5,500
East and West Indies and Africa	100,000
	155,500

The dismemberment of Norway from Denmark, which took place in 1814, abstracted full one-third of her population and strength, that ancient possession of the Danish crown being estimated to contain at that period 900,000 inhabitants. Denmark received from Sweden, in exchange, Swedish Pomerania, which she again parted with to Prussia for the duchy of Lauenburgh, and a sum of money.

Her remaining territory is, however, compact, and well situated for commerce. The aspect of the continental part is flat and undiversified, containing neither mountains nor rivers of any magnitude, but it is in an excellent general state of cultivation; and, in the character of its climate and rich pasturage, very much resembling our own country.

It is largely indented by the sea, and possesses numerous creeks and bays, as well as internal lakes, but only one canal of importance, that of Kiel. This will admit vessels of 120 tons burden, and extends from the Baltic to the Eyder at Rendsburg, where the river becomes navigable, thus opening a communication between the two seas, or through 105 miles of territory. Its length is twenty-two English miles. Its breadth at top 100 feet, at bottom fifty-four, and depth ten feet. It was begun in 1777, and completed in 1785, at an expense of £800,000 sterling. During the late war between 3000 and 4000 vessels annually passed through it, but in time of peace the number is diminished. It has much improved the internal trade of Sleswick and Holstein.

The revenue of Denmark fluctuates between £1,700,000 and £2,000,000, about £120,000 of which arises from the dues of the Sound: the national debt is nominally £15,000,000. The military force somewhat exceeds 20,000 men; the naval force is only 4000 men in service, but capable of being increased with great facility, as there are between 14,000 and 15,000 registered seamen. The seafaring people of the kingdom are altogether little short of 50,000.

There are no mineral productions in Denmark of any commercial importance; salt is made in considerable quantities from the lime springs of Oldesloe; and a little coal is found; but turf is the great article of fuel. Both timber and salt are imported largely. The agricultural produce consists of wheat, in small quantity, barley, oats, beans, peas, and potatoes; the last very largely. Excellent madder also abounds, and hops, flax, hemp, and tobacco, are partially cultivated. Gardens are seldom seen except in Arak, the great kitchen garden of the capital. The horned cattle and horses are very superior; in Holstein are some of the best working breeds of both, that are known: the exportation of horses is said to amount to 1200 or 1500 annually, valued at from £160,000 to £200,000 sterling. Milch cattle are also well managed here: butter and cheese abound: the sheep, though recently improved by the introduction of merino, and other breeds, are still inferior. 'There are now better meadows, and more hedges and walls in Denmark,' says Mr. Louden, 'than in any country of Germany of the same extent.' Here was founded, in 1686, the first veterinary school in Germany. 'Artificial grasses and herbage plants enter into most rotations, and rye-grass is perhaps more sown in Holstein than any where, excepting in England. In a word, considering the disadvantages of climate, the agriculture of Denmark is in a more advanced state than that of any other kingdom of Germany.' Fishing in the bays and creeks is conducted on a large scale; the most important branch is the herring fishery; beds of oysters and muscles are not uncommon: and fresh water fish abound in several arms of the Baltic, so little is that sea impregnated with salt.

Denmark has pursued a studiously pacific policy for more than half a century, and the consequence, until nearly the close of the late wars of the French revolution, were the uninterrupted improvement and extension of her commerce. In 1800 she possessed above 2000 merchant men, 20,000 seamen, and 250,000 tons of shipping. During our second war with France these were in a state of rapid increase, but the seizure of her navy in 1807 by Great Britain, and the consequent breach between the two countries, permitted her no longer to carry on a neutral trade, and she has scarcely to the present time recovered the blow. The chief intercourse of the Danes is with the adjacent coasts of the Baltic, with England, Holland, France, and the Mediterranean.

They have found the benefit of a general carrying trade so considerable, that they have pushed it with success, both in the Mediterranean (where their flag is respected by the Barbary states, equally with that of stronger powers), and to the most distant parts of the globe. The whale fishery, likewise, employs a considerable portion of their seamen, and in the West India trade they have about seventy sail of merchantmen. Their connexion with the Guinea and Gold coasts has been in a great measure discontinued since their honorable abolition of the slave trade in 1803.

The principal exports from Denmark to England are skins, raw hides, and, when our corn laws permit, oats. Until lately the most extensive part of the trade between the two countries was timber from Norway. The imports from England are manufactured articles, and colonial produce. The duties on the importation of foreign commodities into Denmark are high, but all kinds of merchandise, with the exception of the following articles, are allowed to be imported; viz. sugar, either raw or refined, coming from European ports, porcelain, colored delf, woolcards, roasted coffee, printed calicoes, and some kinds of woollen cloth.

In 1797 the government laid open the trade to the East Indies (previously monopolised by a Danish East India Company), to all private merchants. Similar liberal regulations have been made with regard to intercourse with their West Indian possessions. The Icelandic trade was laid open by an ordinance from the king towards the close of 1816. The exports of Denmark to this distant part of her dominions are grain, wine, brandy, tobacco, and spices, together with linen and woollen cloths, timber, and hardware. The vessels generally sail thither in May and June, and return with salt fish, whale oil, coarse cloth, woollen stockings, gloves, hides, skins, feathers, and Eider-down. All the necessary supplies for the Greenland colonies are transmitted from the parent country; and oil, whalebone, seal-skins, and other articles, furnished by the fisheries in the adjacent seas, are taken in return. The manufactures of Denmark are confined to the supply of her own most common wants: and it is necessary to import hardware, printed cottons, and linen. The porcelain manufacture is carried on by the government. A late return of the sugar refineries in Denmark makes their number forty-six; that of paper mills twenty-two; iron foundries four.

The constitution of Denmark was of a free Gothic original. The convention of the estates, even including the representatives of the boors or peasants, elected the king, having still a regard to the son of their late monarch, whom, however, they made no scruple of setting aside, if they deemed him unworthy of the royal dignity. The convention enacted laws; conferred the great offices of state; debated all affairs relating to commerce, peace, war, and alliances; and occasionally gave their consent to the imposition of necessary taxes. The king was only the chief magistrate of the people. His business was to see justice administered impartially; to command the army in time of war; to encourage industry, religion, arts, and sciences; and to watch over the interests of his subjects. But, by the revolution, in 1660, the constitution was new-modelled, and it was declared that 'the hereditary kings of Denmark and Norway should be in effect, and ought to be esteemed by their subjects, the only supreme head upon earth; they shall be above all human laws, and shall acknowledge, in all ecclesiastical and civil affairs, no higher power but God alone. The king shall enjoy the right of making and interpreting the laws; of abrogating, adding to, and dispensing with them. He may also annul all the laws which either he or his predecessors

shall have made, excepting this royal law, which must remain irrevocable, and be considered as the fundamental law of the state. He has the power of declaring war, making peace, imposing taxes, and levying contributions of all sorts,' &c. &c. It is finally added, 'If there is any thing further which has not been expressly specified, all shall be comprised in the following words:—The king of Denmark and Norway shall be the hereditary monarch, and endued with the highest authority; insomuch that all that *can be* said and written to the advantage of a Christian, hereditary, and absolute king, shall be extended under the most favorable interpretation to the hereditary king or queen of Denmark and Norway,' &c. To this singular step the representatives of the people were urged at that time by the tyranny of the nobles. They found a hundred tyrants, as a late political bishop said, a hundred times worse than one. The nobility were obliged to make a similar surrender of their peculiar privileges.

The established religion is the Lutheran and Episcopal. The reformation was introduced in 1536, the crown taking possession at that period of the revenues of the church, and depriving the bishops of their temporal power: they have at present full spiritual jurisdiction, but no votes in the legislature; and there exists a complete toleration of dissenters. There is a university at Copenhagen on a large scale, and another of smaller funds at Kiel. There is also a college with four professors at Odensee in Funen; and Danish literature, though not of general pretensions, has yielded in modern times some distinguished names. We need only mention those of Niebuhr and Le Brun.

Saxo Grammaticus, the most ancient and best of the Danish historians, derives the name of Denmark from Dan the son of Humble, the first king, and Mark, a word signifying a country, in several dialects of the Teutonic; according to which etymology, the word Denmark signifies the country of Dan. He is said to have flourished about A. A. C. 1038 or 1050. Almost all historians agree that he was the son of Humble, a native of Zealand. His possessions and influence were very considerable, not only in Zealand, but in the islands of Langeland and Mona. It was his courage, however, and skill in the art of war, that induced the inhabitants of Denmark to choose him for their king. He was called to the assistance of the Jutlanders upon an irruption of the Saxons into their territories, and promised the sovereignty of the country if he drove out the enemy. On this he raised an army, gained a complete victory over the Saxons, and obliged them to leave the country; and he was accordingly elected king. The history of Denmark, for several ages after Dan, is filled with fabulous exploits of heroes, encounters with giants, dragons, &c. One of their kings named Frotho, who reigned about A. A. C. 761, is said to have conquered Britain, Sleswick, Russia, Pomerania, Holstein, &c. an assertion which cannot easily be credited, considering the difficulty which succeeding warriors, even the greatest in the world, found to subdue the inhabitants of those countries. It is certain, however, that anciently the kingdom of Denmark made a much more conspicuous figure than it does at present. The Danes appear to have had a very considerable naval force almost from the foundation of their empire; and the conquests they undoubtedly made in our island are certain proofs of their valor. Their chief enemies were the Swedes, Norwegians, and Saxons; especially the first. With one or other of these nations almost perpetual war was carried on. The kingdom was also often rent by civil dissensions, which the neighbouring monarchs did not fail to take advantage of, in order to reduce the kingdom of Denmark under their subjection. As in general, however, neither party came off with much advantage, the history of these wars affords nothing interesting.

One of the most illustrious of the kings of Denmark was Canute II., the son of Sueno I., surnamed the Great, from his wisdom as well as his conquests. He was at once king of Denmark, Norway, and England. See CANUTE and ENGLAND. He also conquered a great part of Sweden. Alstedius ranks him as the sixty-seventh monarch of Denmark. Between his son Canute III. and Sueno III. there was a succession of ten kings of whom little important is recorded. One of the greatest of the Danish monarchs, after Canute the Great, was Valdemar I. who obtained the throne in 1157; having defeated and killed the usurper Sueno III. after a civil war of ten years. He maintained a long war with the Vandals, whose power he at last entirely broke, and reduced under his subjection the island of Rugen. He also proved victorious over the Norwegians, so that their king and queen came in person to submit to him. In 1165, he laid the foundations of the city of Dantzic; which, though it has since become a place of very great consequence, consisted at first only of a few poor fishermen's huts; but the privileges and immunities conferred upon it by this monarch, soon proved the means of its becoming a flourishing city. In 1169, he entirely subdued the Courlanders; and, soon after, was invested with the duchy of Holstein by the emperor Frederic Barbarossa. He is said to have been poisoned by a quack medicine, given with a design to recover him from a distemper with which he was seized in 1182, after reigning twenty-eight years. In 1195, Canute VI., Valdemar's son and successor, caused a muster to be made of all the men fit to bear arms in his dominions; and ordered each province to fit out its proportion of shipping, every way equipped, and ready for action. The whole force of Denmark, at that time, consisted of 670 ships of war, besides the squadrons supplied by vassals, tributary states, and allies. The number of the land forces is not mentioned. In the reign of this prince, the Danish dominions were enlarged by the conquest of Stromar, and the districts of Lubec and Hamburgh, formerly Nordalbingia, but now included under the general name of Holstein. He died in 1203, and was succeeded by Valdemar II. who proved a very warlike prince. In 1211 he founded the city of Stralsund. He built the castle of Droningholm in memory of his queen, that name importing the Queen's Island; and

gained in 1218 a victory over the Livonians near the fortress of Valdemar, which was thus named from him. The flourishing state in which Denmark was at this time, appears from an estimate of the revenues of the tributary provinces, which is still extant. He kept for constant service 1400 great and small ships, each of which at a medium carried 121 soldiers; making the whole of the standing forces, besides garrisons, consist of 169,400 fighting men. In 1223, however, Henry Palatine, earl of Swerin, a German prince, having been deprived of part of his dominions by Valdemar, surprised and carried off the king himself, and kept him close prisoner for three years. The conditions on which he at last obtained his liberty were,—that he should pay a large sum of money; relinquish Holstein, Swerin, Hamburgh, and all his possessions on the other side of the Elbe; and solemnly swear that he would never take any measures to punish Henry or his associates. This treaty was signed on the 25th of March 1226. Besides these territories, which Valdemar was obliged to cede by treaty, many tributary princes took the opportunity of his captivity to recover their liberty; and among the rest the inhabitants of Lubec revolted, and entered into alliance with Albert, duke of Saxony, against him. Valdemar, however was not of a disposition to submit tamely to such treatment. He obtained a dispensation from the pope to break his engagements with Henry, and immediately entered Holstein at the head of a numerous army. Here he was met by several German princes; and a desperate engagement ensued. Valdemar at first had the advantage; but, being wounded in the eye, his troops were at last defeated with great slaughter. It does not appear that he was ever able to revenge himself, or to recover the dominions he had lost. Instead of this he was obliged, in 1228, to cede Lauenburg to the duke of Saxony, who had already seized on Ratzburg and Molna. Soon after his eldest son, Valdemar, was accidentally killed as he was hunting, and his two other sons married the daughters of his two greatest enemies. Abel, the third son, married the daughter of Adolphus duke of Holstein; and Eric, the second, the duke of Saxony's daughter. These misfortunes are supposed to have hastened his death, which happened in April, 1242; and on this the kingdom was divided between the two young princes, a war commencing the very next year between them. A peace was concluded the year following, and war renewed the year after. In 1250 Eric paid a visit to his brother Abel, entreating his mediation between him and the princes of Holstein, with whom he was then at war. Abel received him, in appearance, with great kindness, but in the mean time laid a plan for murdering him at sea: this was effected, and Abel became master of the whole kingdom. But he did not long enjoy the sovereignty thus wickedly obtained. He was tormented by his own conscience, especially when he found, among his brother's papers, one by which he was left heir to the whole kingdom on the decease of Eric, and many kind expressions with regard to himself. He was at last killed in a battle with his own subjects in 1252.

From this time to 1333 the kingdom of Denmark gradually declined. Usurpers established themselves in different provinces; while the kings of Sweden did not fail to avail themselves of the distracted state of the Danish affairs. In 1333 died Christopher II., who possessed only the cities of Scanderberg in Jutland and Neoburg in Fionia, with some few other inconsiderable places, of all the hereditary dominions of Denmark. Halland, Holbeck, Calemburg, and Samsoe, were held by Canute Porsius; Schonen, Lystre, and Bleking, by the king of Sweden, to whom they had been lately sold: John earl of Wagria had the jurisdictions of Zealand, Falstre, Laaland, and Femerin: Gerhard, those of Jutland and Fionia; and Lawrence Jonea those of Langeland and Arras. After the death of Christopher an interregnum of seven years, or according to Marcel of fifteen, ensued. The first attempt for the sovereignty was made by Otho, second son to the late king, who tried to drive Gerhard out of Jutland, but was taken prisoner, and closely confined by Gerhard. The king of Sweden next wrote to pope Benedict XIII., beseeching his Holiness to confirm to him the provinces of Schonen, &c., which he possessed; and to allow him to subdue the rest of the kingdom, which was now usurped and rendered miserable by a set of petty princes, who knew not how to govern. To influence the pope he promised to hold this kingdom of him, and to pay him the usual tax collected by the church. This request, however, was refused. Valdemar of Sleswic, nephew to Gerhard, had formerly been elected king; but, on account of the superior influence of Christopher, had never enjoyed the sovereignty. He now, at the instigation of his uncle, resumed his ambitious views. Several of the nobility also cast their eyes on young Valdemar, Christopher's son. But, while these two princes were laying schemes to aggrandise themselves, the unhappy Danes were distressed by exorbitant taxes, famine, and pestilence, which destroyed more than half of the inhabitants. In the midst of these calamities Gerhard, sovereign of Jutland, proposed to his nephew Valdemar an exchange of territories, which he believed would prove favorable to the designs of the latter on the crown. A treaty for this purpose was actually drawn up and signed; but the inhabitants, notwithstanding their distressed situation, so highly resented their being disposed of like cattle, from one master to another, that they refused to pay the taxes. Gerhard resolved to compel them, and therefore led 10,000 men, whom he had levied in Germany, into the heart of the province. Providence, however, now raised up an enemy to this tyrant. One Nicholas Norevi, a man greatly esteemed for his courage, public spirit, and prudence, beheld with sorrow the condition to which Denmark was reduced. He had long meditated various projects for its relief. Young Valdemar, Christopher's son, had a number of adherents in the kingdom, his most dangerous enemy was Gerhard; and, if he could be removed, the Jutlanders would at least be free from an oppressor, and might choose Valdemar, or any other they thought proper, for their sovereign. Collecting, therefore, a body of chosen horse he marched in the night to Rander-

sbusen, where Gerhard had fixed his head-quarters; and, having forced open the tyrant's apartment, immediately put him to death. He then fled with the utmost expedition, and, though overtaken by a party of the enemy's horse, forced his way through them and escaped. Gerhard's sons, hearing of their father's death, retired into Holstein, leaving the army, composed chiefly of Holsteiners, to be cut to pieces by the enraged peasants, who fell upon them from every quarter. Still, however, the Holsteiners kept possession of the citadels and fortified places, from which Nicholas resolved to dislodge them. He accordingly attacked and took Landen, a castle situated on the river Scherne: After which he laid siege to Albeg; but the garrison making an obstinate defence, he turned the siege into a blockade, by which they were soon reduced to great extremity. The governor sent an express to Gerhard's sons, acquainting them with the impossibility of his holding out more than a few days, without being relieved. They marched to his relief, and came up with Nicholas just as the governor was ready to surrender, but were defeated; though Nicholas was unfortunately killed in the engagement. Jutland having thus regained its liberty, the rest of the kingdom followed its example. Zealand first openly declared itself. Here Henry, Gerhard's son, maintained several garrisons; and resolved to defend his possessions in spite of all the power of the inhabitants. For this purpose he drew together an army; but in the mean time a tumult arose among the peasants, on account of a Danish nobleman slain by the Holsteiners. By this the people were so irritated that, falling upon the Holsteiners, they killed 300 of them, drove the rest out of the island, and chose Valdemar III. Christopher's son, for their sovereign. The Danes now resumed their courage; the lands were cultivated, the famine and pestilence ceased, and the kingdom began to flourish as formerly. Matters continued prosperous till 1373, when Valdemar III. died, and was succeeded by his daughter Margaret. Marcel ranks his grandson Olaus V. as his immediate successor; but he, being an infant, can hardly be said to have reigned, and therefore Alstedius ranks his mother, who governed during his infancy, as the successor of Valdemar.

Margaret raised the kingdom of Denmark to its highest pitch of glory. She defeated and deposed Albert king of Sweden, in 1487; and partly by her address, partly by hereditary right, she formed the union of Calmar, by which she was acknowledged sovereign of Sweden, Denmark, and Norway. She held her dignity with such firmness and courage, that she was justly styled the Semiramis of the North. Her only son, Olaus V. dying at seven years of age, in 1388, she adopted her sister's son, Eric duke of Pomerania, as her successor, and died in 1412, after a glorious reign of thirty-seven years. Eric IX., her successor, being destitute of her great qualifications, the union of Calmar fell to nothing: but Norway still continued annexed to Denmark. Some say he was deposed, but Alstedius states that he resigned the crown in 1438, and retired to Pomerania, where he died in 1469. Upon his resignation his nephew, Christopher III. duke of Bavaria, and count palatine of the Rhine, was elected. After an inglorious reign of ten years, during which Sweden was separated from Denmark, he died in 1448, and made way for a new royal race, which still continues to reign in Denmark, by the election of Christian, count of Oldenburg. Christian I. was crowned king of Denmark in 1448, of Norway in 1450, and of Sweden upon the deposition of Charles VIII. in 1457, who, however, was restored by the Swedes in 1464; Christian not having adhered to the terms he had made with them. He died in 1481, and was succeeded by his son John, who had frequent wars with the brave Swedish governors, Steno and Sweno Sture. John, dying in 1513, was succeeded by Christian II. who recovered Sweden for a short time on the death of Steno Sture; but was expelled for his cruelties, by the illustrious Gustavus Vasa, who threw off the Danish yoke, and restored the independence of his country in 1520. See SWEDEN.

Christian died in 1559, but was previously deposed, and Frederick I. duke of Holstein elected king in 1523. He reigned only ten years; dying in 1533, when he was succeeded by his son Christian III. a wise and politic prince, by whom, in 1536, the protestant religion was established in Denmark. He was succeeded in 1559 by his son Frederick II. who, after reigning about twenty-nine years, left the kingdom to his son Christian IV. who, however, was not crowned till 1596. This monarch twice visited England, in compliment to his son-in-law king James I.; in July 1606 and 1614. In 1629, he was chosen head of the Protestant league formed against the house of Austria; but, though personally brave, he was in danger of losing his dominions; when he was succeeded in that command by the famous Gustavus Adolphus king of Sweden. The Dutch having obliged Christian, who died in 1648, to lower the duties of the Sound, his son Frederic III. consented to accept of an annuity of 150,000 florins for the whole. The Dutch after this persuaded him to declare war against Charles X. king of Sweden, which had almost cost him his crown in 1657. Charles stormed the fortress of Friedrichstadt; and, in the succeeding winter, he marched his army over the ice to the island of Funen, where he surprised the Danish troops, took Odensee and Nyburg, and marched over the Great Belt to besiege Copenhagen itself. Oliver Cromwell interposed; and Frederic defended his capital with great magnanimity till the peace of Roschild; by which he ceded the provinces of Halland, Bleking, and Sconia, the island of Bornholm, Bahus, and Drontheim, in Norway, to the Swedes. Frederic sought to elude these severe terms; but Charles took Cronenburg, and once more besieged Copenhagen by sea and land. The steady inteprid conduct of Frederic under these misfortunes endeared him to his subjects; and the citizens of Copenhagen made an admirable defence, till a Dutch fleet arrived in the Baltic, and beat the Swedish fleet. The fortune of war was now entirely changed in favor of Frederic, who showed on every occasion great abilities both civil and military: and, having forced Charles to raise the siege of Copenhagen, might have carried the war into Sweden, had not the English fleet under Montague appeared in the Baltic.

This enabled Charles to besiege Copenhagen a third time: but, France and England offering their mediation, a peace was concluded in that capital: by which the island of Bornholm returned to the Danes; but the island of Rugen, Bleking, Halland, and Schonen, remained with the Swedes.

The year 1660, as we have already intimated, affords an instance of a revolution in Denmark, unparalleled in the annals of history, viz. that of a free people resigning their liberty into the hands of their sovereign of their own accord, and without the least compulsion rendering him despotic. This was in part occasioned by the great character which Frederic had acquired by his late prudent and valiant conduct. At that time he had also taken care to ingratiate himself with the commonalty, by obliging the nobility to allow them some immunities which they did not enjoy before, and permitting them by a special edict to possess lands. After the conclusion of the treaty with Sweden, a diet was summoned at Copenhagen, to take into consideration the state of the kingdom, which was now very much exhausted, by the calamities of war. This distressed state of affairs was, by the commons, attributed to the nobility; who, on the other hand, took no care to conciliate the affections of the inferior classes: but rather increased their discontents by their arrogance. They had even the imprudence to remonstrate against the immunities above mentioned, which had been granted by the king during the siege of Copenhagen. In consequence of this, the deputies of the commons and clergy united against them; and, being joined by the citizens of the capital, formed a very considerable party. On bringing forward in the assembly the sums necessary for the national exigencies, a general excise was proposed by the nobles on every article of consumption; and they professed themselves willing to submit to it, though, by an express law, their order was to be exempted from taxes. This offer, however, was accompanied with a remonstrance to the king; in which they endeavoured to reclaim many obsolete privileges, and to add fresh immunities, tending to diminish the royal prerogative, and check the rising influence of the commons and clergy. This proposal occasioned great disputes in the diet; and the two inferior orders insisted, that they would not admit of any tax which should not be levied equally upon all ranks. The nobles not only refused to comply with this proposal, but even to be subject to the present tax for more than three years; pretending that all taxes whatever were infringements on their privileges. By way of compensation, however, they proposed new duties upon leather and stamped paper, and at last offered to pay a poll tax for their peasants. This at first seemed to be agreeable to the two inferior estates; but they suddenly changed their minds, and demanded that the fiefs and domains, which the nobles had hitherto possessed exclusively, and at a very moderate rent, should be let to the highest bidder. In the heat of the dispute, one of the chief senators having imprudently thrown out some reproachful expressions against the commons, a general ferment ensued, and the assembly was broken up in confusion. This gave occasion to the interposition of the king's friends; and the idea of rendering the crown hereditary, and enlarging the royal prerogative, began to be suggested as the proper method of humbling the nobility. This was first proposed by the bishop of Zealand; an act for rendering the crown hereditary was drawn up; and the best method of publicly producing it taken into consideration. All this time the king seemed quite inactive, nor could he be prevailed upon to take any part in an affair which so nearly concerned him. But this indolence was abundantly compensated by the alertness and diligence of his queen. On the morning of the 8th of October, therefore, the bishop of Zealand having obtained the consent and signatures of the ecclesiastical deputies to the new proposal, delivered it to Nausen, burgomaster of Copenhagen and speaker of the commons, whose speech in favor of it had such an effect upon the assembly, that they subscribed it unanimously; the nobles being all the while in perfect security, and entirely ignorant of the transaction. Next day it was presented to the king by the bishop and Nausen; and finally to the nobles; who, while they professed their general willingness to assent to the declaration, observed to the speaker of the commons that it required the most serious discussion. Nausen replied, that the other estates had already taken their resolution; that they would lose no time in debate; and that, if the nobles would not concur with them, they would immediately repair to the palace by themselves, where they had not the least doubt that the king would graciously accept their proffer. In the mean time the nobles had privately despatched a message to the king, intimating that they were willing to render the crown hereditary in the male line of his issue, provided it was done with the usual formalities. But his majesty stipulated for an equal right of succession in the female line. He added, however, that he by no means wished to prescribe rules for their conduct; they were to follow the dictates of their own judgment, and he would owe every thing to their free consent. In the interim, the other deputies arrived at the palace, and the bishop of Zealand addressed his majesty on the resolution taken by the clergy and commons, adding, that they were ready to sacrifice their lives in the defence of an establishment so salutary to the country. His majesty, while he assured them of his protection, and promised a redress of all grievances, mentioned the concurrence of the nobles as a necessary condition; and dismissed them with an exhortation to continue their sittings until they should have brought their design to a pacific conclusion. The nobles, breaking up without coming to any resolution, and preparing, it is said, to leave Copenhagen, the court and the popular party took the necessary measures to force them to a concurrence. Orders were given to shut the gates of the capital, when a message arrived that they were ready to concur with the commons, and subscribe to all the conditions of the royal pleasure. Nothing now remained but to ratify the transaction with proper solemnity. Accordingly, on the 16th of October, the estates annulled in the most solemn manner, the capitulation or charter signed by the king on his accession to the throne; absolved him

from all his engagements, and cancelled all the limitations imposed upon his sovereignty! The whole was concluded by the ceremony of doing homage, taking the new oath with great ceremony; after which a new form of government was promulgated under the title of The Royal Law of Denmark.

Frederic III. was succeeded, in 1670, by his son Christian V., who obliged the duke of Holstein Gottorp to renounce the advantages he had gained by the treaty of Roschild. He then recovered a number of places in Schonen; but his army was defeated in the bloody battle of Lunden by Charles XI. of Sweden. This defeat did not put an end to the war, which Christian obstinately continued till he was defeated entirely at the battle of Landscroon; and, having exhausted his dominions in his military operations, he was in a manner abandoned by all his allies, and forced to sign a treaty on the terms prescribed by France, in 1679. Christian, however, did not desist from his military attempts; and at last became the ally and subsidiary of Louis XIV. He died in 1699, and was succeeded by Frederic IV., who, like his predecessors, maintained his pretensions upon Holstein; and, probably, would have become master of that duchy, had not the English and Dutch fleets raised the siege of Tonningen; while the young king of Sweden, Charles XII., then only sixteen years of age, landed within eight miles of Copenhagen, to assist his brother-in-law the duke of Holstein. Charles probably would have made himself master of Copenhagen, had not his Danish majesty agreed to the peace of Travendahl, which was entirely in the duke's favor. By another treaty concluded with the States General, Frederic obliged himself to furnish a body of troops who were to be paid by the confederates; and who afterwards did great service against the French. Notwithstanding this peace, Frederic was perpetually engaged in wars with the Swedes. While Charles was an exile at Bender, he marched through Holstein into Swedish Pomerania, and in 1712 into Bremen, and took the city of Stade. His troops, however, were totally defeated by the Swedes at Gadesbusch, who laid his favorite city of Altona in ashes. Frederic revenged himself by seizing great part of the ducal Holstein, and forcing the Swedish general, count Steinbock, to surrender himself prisoner, with all his troops. In 1716 the success of Frederic was so great, in taking Tonningen and Stralsund, driving the Swedes out of Norway, and in reducing Wismar and Pomerania, that his allies began to suspect he was aiming at the sovereignty of all Scandinavia. Upon the return of Charles of Sweden from his exile, he renewed the war against Denmark with a most embittered spirit; but upon his death at the siege of Fredericshal, Frederic durst not refuse the offer of his Britannic majesty's mediation between him and the crown of Sweden; in consequence of which a peace was concluded at Stockholm, which left him in possession of the duchy of Sleswick. Frederic died in 1730, after having seen his capital reduced to ashes by an accidental fire, in 1728. His son and successor Christian VI. made no other use of his power, and the advantages with which he mounted the throne, than to cultivate peace with all his neighbours, and to promote the happiness of his subjects, whom he eased of many oppressive taxes. In 1734, after guaranteeing the Pragmatic Sanction, he sent 6000 men to the assistance of the emperor, during the dispute about the succession to the crown of Poland. Though he was pacific, yet he was jealous of his rights, especially over Hamburgh. He obliged the Hamburghers, in 1736, to call in the mediation of Prussia, to abolish their bank, to admit the coin of Denmark as current, and to pay him a million of silver marks. He had, in 1738, a dispute with king George II. about the little lordship of Steinhorst, which had been mortgaged to the latter by the duke of Holstein Lauenburg, and which Christian said belonged to him. Some blood was spilt during the contest; in which Christian, it is thought, never was in earnest. It brought on, however, a treaty, in which he availed himself of his Britannic majesty's predilection for his German dominions; for he agreed to pay Christian a subsidy of £70,000 sterling a year on condition of keeping in readiness 7000 troops for the protection of Hanover: which was a gainful bargain for Denmark. And two years after he seized some Dutch ships for trading without his leave to Iceland: but the difference was made up by the mediation of Sweden. Christian had so great a party in that kingdom, that it was generally thought he would revive the union of Calmar, by procuring his son to be declared successor to his then Swedish majesty. Some steps for that purpose were certainly taken: but whatever Christian's views might have been, the design was frustrated by the jealousy of other powers. Christian died in 1746, with the character of being an excellent monarch. His son and successor, Frederic V., had, in 1743, married the princess Louisa, daughter to king George II. He improved upon his father's plans for the happiness of his people; but took no concern, except that of a mediator, in the German war. For it was by his intervention that the treaty of Closterseven was concluded between the duke of Cumberland and the French general Richelieu. Upon the death of queen Louisa, mother to the late king, he married a daughter of the duke of Brunswick Wolfenbuttel; and died in 1766.

He was succeeded by his son Christian VII. who married the princess Carolina Matilda of England, an alliance which proved unfortunate, as is generally stated through the intrigues of the queen dowager. The king had displaced several of her friends who had for some time had a share in the administration; and the two new favorites, Brandt and Struensee, who had now appeared, paid great court to the queen. The dowager on this took occasion to insinuate, that the queen had condescended to an intrigue with Struensee. The result is familiar to most of our readers. When the plan of removing the existing administration was brought to maturity, it was resolved to surprise the king in the middle of the night, and force him instantly to sign an order for committing the ministers to separate prisons; to accuse them of high treason in general, and particularly with a design to dethrone or poison

the king. If this could not be properly authenticated, it was determined to suborn witnesses to confirm the report of a criminal correspondence between the queen and Struensee. This design was executed on the night of the 16th of January, 1772, when a masked ball was given at the court. The queen, after having danced most part of the evening with count Struensee, retired to her chamber about two in the morning. About four the same morning prince Frederic rose, and went with the queen dowager to the king's bed-chamber, accompanied by general Eichstedt and count Rantzau. Having ordered his valet de chambre to awake the king, they informed him that the queen, with Struensee, his brother, and Brandt, were at that moment busy in drawing up an act of renunciation of the crown, which they would immediately after compel him to sign; and there was therefore a necessity for him to give an order for their arrest. Christian is said to have hesitated for some time, and to have been inclined to refuse this scandalous requisition; but at length, through importunity, and, according to some accounts, being even threatened into compliance, he consented to what they required. Count Rantzau was despatched, at an untimely hour, into the queen's apartments, and immediately executed the orders of the king. This unfortunate lady, together with an infant princess, was conveyed in one of the king's coaches to the castle of Cronenburgh, escorted by a party of dragoons. Struensee and Brandt were seized in their beds and imprisoned, as well as other members of the administration to the number of eighteen. The queen dowager and her adherents assumed the government, and a total change took place in all departments of the state. The prince royal, son of queen Carolina Matilda, then in the fifth year of his age, was put under the care of a lady of quality, who was appointed governess, under the superintendency of the queen dowager. Struensee and Brandt were put in irons, and underwent long and frequent examinations. Struensee at last confessed that he had conducted a criminal intrigue with the queen. These ministers were both beheaded on the 28th of April; but many of their partisans were set at liberty. Such is one mode of accounting for the revolution of 1772. The confession of Struensee is by many supposed to have been extorted by fear of the torture, and to have no foundation in truth; but, as no means were used by the court of Great Britain to clear up the queen's character, the affair undoubtedly wears a suspicious aspect. At last, however, his Britannic majesty interfered so far as to send a small squadron of ships to convoy the unhappy princess to Germany. The city of Zell was appointed for her residence; and in this place she died of a fever on the 10th May, 1775, aged twenty-three years and ten months.

Of Struensee as a minister, 'it must not be forgotten,' says an able writer in the Edinburgh Review, September 1826, 'that he was the first minister of an absolute monarchy who abolished the torture, and that he patronised those excellent plans for the emancipation of the enslaved husbandmen, which were first conceived by Reverdil a Swiss, and of which the adoption by the second Bernstorff has justly immortalised that statesman. He will be honored by after ages for what offended the Lutheran clergy: the free exercise of religious worship granted to Calvinists, to Moravians, and even to Catholics; for the Danish clergy were ambitious of retaining the right to persecute, not only long after it was impossible to exercise it, but even after they had lost the disposition to do so; at first to overawe, afterwards to degrade non-conformists; in both stages, as a badge of the privileges and honor of an established church.'

The same writer, in a Review of general Falkenskiold's Memoirs of the Revolution of 1772, observes, that the evidence against the queen consisted in a number of circumstances (none of them incapable of an innocent explanation) sworn to by her attendants, who were employed as spies on her conduct. She owned that she was guilty of much imprudence; but in her dying moments she declared to M. Roques, pastor of the French church at Zell, that she never had been unfaithful to her husband. (Communicated by M. Roques to M. Secretan, the editor of Falkenskiold, on the 7th of March 1780. Falk. 234.) It is true that her own signature affixed to a confession was alleged against her. But if general Falkenskiold was rightly informed (for he has every mark of honest intention), that signature proves nothing but the malice and cruelty of her enemies. Schack, the counsellor sent to interrogate her at Cronenburgh, was received by her with indignation when he spoke to her of her connexion with Struensee. When he showed Struensee's confession to her, he artfully intimated that the fallen minister would be subjected to a very cruel death if he was found to have falsely criminated the queen. 'What!' she exclaimed, 'do you believe that if I was to confirm this declaration, I should save the life of that unfortunate man?' Schack answered with a profound bow. The queen took a pen, wrote the first syllable of her name, and fainted away. Schack completed the signature, and carried away the fatal document in triumph. Struensee himself, however, had confessed his intercourse to the commissioners. It is said that his confession was obtained by threats of torture, facilitated by some hope of life, and influenced by a knowledge that the proceeding against the queen could not be carried beyond divorce. But his repeated and deliberate avowals to Dr. Munter do not (it must be owned) allow of such an explanation. Scarcely any supposition favorable to this unhappy princess remains, unless it should be thought likely, that as Dr. Munter's narrative was published under the eye of her oppressors, they might have caused the confessions of Struensee to be inserted in it, by their own agents, without the consent, perhaps without the knowledge of Munter, whose subsequent life is so little known, that we cannot determine whether he ever had the means of exposing the falsification. It must be confessed, however, it is added, that internal evidence does not favor this hypothesis; for the passages of the narrative, which contain the avowals of Struensee, have a striking appearance of genuineness.

Their treatment of Matilda did not long prove advantageous to the queen dowager and her party.—Another revolution took place in April

1784, when the queen dowager's friends were removed, and a new council was formed under the sole auspices of the prince royal. After that period the king, who from the beginning of his reign showed a great degree of incapacity, was entirely detached from the government; and the prince, who finally succeeded to the throne in 1808, conducted with great circumspection and ability the whole of the public affairs. The Danes took part with the late empress of Russia in her war with the Turks, the immediate opponent of Denmark being Sweden, and, in 1801, acceded to the confederacy formed by the northern powers against the naval superiority of Great Britain, under the title of a Convention of Neutrality. But this league was quickly dissolved by the appearance of Lord Nelson in the Baltic, who, in the battle of the 2d April of that year, forced the line of defence formed by the Danish fleet before Copenhagen, and compelled the Danes to agree to a cessation of arms, in order to preserve their capital. In this short war they lost their islands in the West Indies, and the settlement of Tranquebar, on the coast of Coromandel. But the dispute between England and the northern powers being soon after amicably adjusted by a treaty, their foreign possessions were restored to them. We have noticed a second rupture between Denmark and Great Britain in 1807, and its fatal consequence to the commerce of the former. In fact it led also to the still more humiliating result of the dismemberment of Norway. For in the united efforts of the allies to crush the power of Buonaparte, this country and Russia both came into that arrangement with the crown prince of Sweden, which terminated in his taking possession of this old appendage of Denmark.

The language of Denmark is a dialect of the Teutonic, and bears a strong affinity to that of Norway: it is disagreeable to strangers on account of the drawling tone with which it is pronounced. Many words have been borrowed from the German, and the Dutch is often used in common discourse. French also is well understood, and frequently spoken by all classes.

DENNIS (John), once a critic of celebrity, the son of a tradesman in London, was born in 1657. He received the rudiments of his education at Harrow, and took his degree of A. B. at Caius College, Cambridge, after which he made the tour of Europe. On his return he became acquainted with Dryden, Wycherley, Congreve, and Southern; whose conversation inspiring him with a passion for poetry, and the belles lettres, diverted him from the exercise of any profession. His zeal, however, for the protestant succession recommended him to the duke of Marlborough, who procured him a place in the customs worth £120 per annum; which he enjoyed for some years, till, by want of economy, he was obliged to dispose of it to satisfy some pressing demands. In 1704 came out his favorite tragedy, Liberty Asserted; in which were so many strokes on the French nation, that he had worked himself into a persuasion, that the king of France would insist on his being delivered up, before he would consent to a peace; and when the congress was held at Utrecht, he is said to have waited on his patron, the duke of Marlborough, to desire that no such article might be stipulated. The duke told him he really had no interest with the ministry; but had made no such provision for his own security, though he could not help thinking he had done the French as much injury as Mr. Dennis. Dennis, partly through a natural petulance of temper, and partly to procure the means of subsistence, was continually engaged in paper wars with his contemporaries. His attacks on distinguished authors were numerous, among whom were Addison, Steele, and Pope. In the close of his days a play was acted for his benefit, at the little theatre in the Hay-market; when Pope, notwithstanding his previous gross abuse of him, even wrote a prologue to the play. He died on the 6th of January, 1733. As a dramatic author, it was justly said of him by a wit, that he was the most complete instructor for a dramatic poet, since he could teach him to distinguish good plays by his precepts, and bad ones by his examples.

DENOM'INATE, *v. a.*
DENOM'INABLE, *adj.*
DENOM'INATION, *n. s.*
DENOM'INATIVE, *adj.*
DENOM'INATOR, *n. s.*
} Fr. *denominer*; Span. *denominár*; Ital. and Lat. *denominare*; from *de* and *nomino*, *nomen*, a name. To give name to. Denominable signifies, that may be named; denomination the name given: denominative, that which gives a name; characteristic: denominator, the giver of a name, or a particular number in the doctrine of fractions. See FRACTIONS.

But is there any token, *denomination*, or monument of the Gauls yet remaining in Ireland, as there is of the Scythians? *Spenser's State of Ireland.*

Predestination is destructive to all that is established among men, to all that is most precious to human nature, to the two faculties that *denominate* us men, understanding and will. *Hammond.*

An inflammation consists of a sanguineous affluxion, or else is *denominable* from other humours, according to the predominancy of melancholy, phlegm, or choler. *Browne's Vulgar Errours.*

Both the seas of one name should have one common *denominator*. *Id.*

Philosophy, the great idol of the learned part of the heathen world, has divided it into many sects and *denominations*; as Stoicks, Peripateticks, Epicureans, and the like. *South.*

He that is a stranger to himself, is a stranger to God, and to every thing that may *denominate* him wise and happy. *Baxter.*

All men are sinners: the most righteous among us must confess ourselves to come under that *denomination*. *Rogers.*

When a single broken number or fraction hath for its *denominator* a number consisting of an unit, in the first place towards the left hand, and nothing but cyphers from the unit towards the right hand, it is then more aptly and rightly called a decimal fraction. *Cocker's Arithmetick.*

The least *denominative* part of time is a minute, the greatest integer being a year. *Id.*

A wit is a very unpopular *denomination*, as it carries terror along with it; and people in general are as much afraid of a live wit, in company, as a woman is of a gun which she thinks may go off of itself, and do her mischief. *Chesterfield.*

DENO'TE, *v. a.* } Lat. *denoto*, to mark;
DENOTA'TION, *n. s.* } to be a sign of; to betoken; to show by signs: the act of denoting; a symptom.

'Tis not alone my inky cloak, good mother,
Nor customary suits of solemn black,
Nor windy suspiration of forced breath,
No, nor the fruitful river in the eye,
That can *denote* me truly. *Shakspeare.*

Prince of the powers invisible! This man
Is of no common order, as his port
And presence here *denote*; his sufferings
Have been of an immortal nature. *Byron.*

DENOUNCE', *v. a.* } Fr. *denoncer*; Span.
DENOUNC'ER, *n. s.* } *denunciar*; Ital. *denon-*
DENOUNCE'MENT. } *ciare*; Lat. *denunciare*, from *de* against, and *nuncio*, to carry orders. To threaten or impugn by public or open proclamation. Denouncement is the proclamation made.

For also whanne we weren among ghou we *denounciden* this thing to ghou, that if ony mon wole not worche, neither ete he. *Wiclif. 2. Tessal. 3.*

I *denounce* unto you this day, that ye shall surely perish. *Deut.*

False is the reply of Cain upon the *denouncement* of his curse, My iniquity is greater than can be forgiven. *Browne.*

He of their wicked ways
Shall then admonish, *denouncing* wrath to come
On their impenitence. *Milton.*

Here comes the sad *denouncer* of my fate,
To toll the mournful knell of separation. *Dryden.*

DENSE, *adj.* } Lat. *densus*. Close; com-
DENS'ITY, *n. s.* } pact; approaching to solidity.

The cause of cold is the density of the body; for all *dense* bodies are colder than most other bodies, as metals, stone, glass; and they are longer in heating than softer bodies. *Bacon.*

In the air the higher you go, the less it is compressed, and consequently the less *dense* it is; and so the upper part is exceedingly thinner than the lower part which we breathe. *Locke.*

While the densest of metals, gold, if foliated, is transparent, and all metals become transparent if dissolved in menstruums, or vitrified, the opacity of white metals ariseth not from their *density* alone. *Newton.*

The air within the vessels being of a less *density*, the outward air would press their sides together; and, being of a greater *density*, would expand them so as to endanger the life of the animal. *Arbuthnot on Aliments.*

That there is a cavity at the centre of the earth is made probable by the late experiments on the attraction of mountains by Mr. Maskelyne, who supposed from other considerations that the *density* of the earth near the surface should be five times less than its mean *density*. *Darwin.*

Dense shadowy leaves on stems aspiring borne
With blight and mildew thin the realms of corn. *Id.*

DE'NSHIRE, *v. a.* A barbarous term of husbandry.

Burning of land, or burn-bating, is commonly call *denshiring*, that is Devonshiring or Denbighshiring, because most used or first invented there. *Mortimer.*

DENT'AL, *adj.* & *n. s.* } From Lat. *dentalis*,
DENTI'CULATION, *n. s.* } *dens, dentis*, a tooth.
DENTI'CULATED, *adj.* } Dental is, relating
DENT'RIFICE, *n. s.* } to the teeth, and the
DENT'ISE, *v. a.* } name of a small
DENT'IST, *n. s.* } shell-fish: denticu-
DENTI'TION. } lated, being set with teeth, like a saw: dentrifrice, a tooth powder: dentise, to renew the teeth; dentition being the corresponding substantive: and dentist, a modern word for the profession of healing, preserving, and drawing teeth.

The old countess of Desmond, who lived till she was seven score, did *dentise* twice or thrice, casting her old teeth, and others coming in their place. *Bacon.*

The Hebrews have assigned which letters are labial, which *dental*, and which guttural. *Id.*

Is this grey powder a good *dentifrice?* *Ben Jonson.*

The *dental* consonants are easy, therefore let them be next; first the labial-*dentals*, as also the lingual *dentals*. *Holder.*

Two small black and shining pieces seem, by the shape, to have been formed in the shell of a *dental*. *Woodward.*

He omits the *denticulation* of the edges of the hill, or those small oblique incisions made for the better retention of the prey. *Grew's Museum.*

The shells of all sorts of shell-fish, being burnt, obtain a caustic nature: most of them, so ordered and powdered, make excellent *dentifrices*. *Id.*

DENTALIUM, in natural history, a shell-fish belonging to the order of vermes testacea. The shell consists of one tubulous straight valve, open at both ends, and not divided into chambers. There are twelve species, distinguished by the angles, striæ, &c. of their shells.

DENTARIA, tooth-wort, or tooth-violet, in botany, a genus of the siliquosa order, and tetradynamia class of plants; natural order, thirtieth, siliquosæ. The siliqua parts with a spring, and the valvules roll spirally backwards; the stigma is emarginated; the calyx closing longitudinally. There are five species, all of them hardy perennials; producing annual stalks twelve or eighteen inches high, adorned with many lobed leaves, and spikes of quadrupetalous cruciform flowers of a red or purple color. They delight in shady places, and are propagated either by seeds or parting the roots. The seeds may be sown in autumn or early in the spring, in a shady border of light earth; and when the plants are three inches high, they may be planted where they are to remain. The time for parting the roots is in October or November, or early in the spring.

DENTATUS (Curius), a renowned Roman general, whose virtues render him more memorable than his victories, flourished A. A. C. 272. He was thrice consul; conquered the Samnites, Sabines, and Lucanians; and gave each citizen forty acres of land, allowing himself no more. The ambassadors of the Samnites making him a visit, found him boiling turnips in a pipkin; upon which they offered him gold to come over to their interest: he told them his design was not to grow rich, but to command those who were so. He defeated Pyrrhus near Tarentum, and received the honor of a triumph.

DENTATUS (Sicinius), a hero of ancient Rome, of the plebeian order, who flourished about A.U.C. 300. When disputes ran high between the patricians and plebeians, concerning the Agrarian law, Dentatus addressed the people, and expatiated upon his achievements and his hardships. He had served his country in the wars forty years; he had been an officer thirty; first a centurion and then a tribune; he had fought in 120 battles, and by the force of his single arm had saved the lives of a multitude of his fellow citizens. He had gained fourteen civic, five mural, and eight golden crowns; besides eighty-three chains, sixty bracelets, eighteen gilt spears, and twenty-three horse-trappings, of which nine were for killing the enemy in single combat: and he had received forty-five wounds, all before, none behind. These were his honors; yet notwithstanding all this, he had never received any share of those lands which were won from the enemy, but continued to drag on a life of poverty and contempt, whilst others possessed those very territories which his valor had won, without any merit to deserve them, or ever having contributed to the conquest. The people unanimously demanded that the law might be passed, and that such high merit should not pass unrewarded. Some of the senators attempted to speak, but were overpowered by the cries of the people. At last a number of resolute young patricians rushing furiously amongst the crowd, broke the balloting urns, and dispersed the multitude. For this riot they were fined by the tribunes, but they gained their object for the time, by getting the Agrarian law postponed. Such was the justice of the Roman patricians, at one of the most virtuous periods of that celebrated republic.

DENTELLA, in botany, a genus of the monogynia order, and pentandria class of plants: CAL. a five-parted perianth. with small subulated leaves; STAM. five short subulated filaments; ANTH. small; PERICARP. globular; CAPS. bilocular; SEED, egg shaped, and very numerous. Species one only, a native of New Caledonia.

DENTE'LLI, *n. s.* Ital. Modillons.

The modillions, or *dentelli*, make a noble show by graceful projections. *Spectator*, No. 415.

DENTILES, or DENTILS, in architecture, an ornament in cornices bearing some resemblance to teeth, particularly used in the Ionic and Corinthian orders.

DENTISCALPRA, in surgery, an instrument for scouring yellow, livid, or black teeth; to which being applied, near the gums, it scrapes off the foul morbid crust.

DENTITION. See ODONTOLOGY.

DENU'DE, *v. a.* } Lat. *denudo*, from *de*
DENU'DATE, *v. a.* } and *nudo* (*ne* and *duo*
DENUDA'TION, *n. s.* } the root of *induo* to clothe). To strip; to make naked.

Till he has *denudated* himself of all incumbrances, he is unqualified. *Decay of Piety.*

Not a treaty can be obtained, unless we would *denude* ourselves of all force to defend us. *Clarendon.*

If in summer-time you *denude* a vine-branch of its leaves, the grapes will never come to maturity. *Ray on the Creation.*

DENUNCIA'TION, *n. s.* } Lat. *denunciatio.*
DENUNCIA'TOR, *n. s.* } See DENOUNCE.

The act of denouncing; the proclamation of a threat; a public menacer.

In a *denunciation* or indiction of a war, the war is not confined to the place of the quarrel, but is left at large. *Bacon.*

Christ tells the Jews, that, if they believe not, they shall die in their sins; did they never read those *denunciations?* *Ward.*

Midst of these *denunciations*, and notwithstanding the warning before me, I commit myself to lasting durance *Congreve.*

The *denunciator* does not make himself a party in judgment as the accuser does. *Ayliffe's Parerg.*

DENY', *v. a.* } Fr. *nier*; Span. *denegar*;
DENI'AL, *n. s.* } Ital. and Lat. *negare*; from
DENI'ER, } Lat. *ne* and *ago*, to refuse to do. To refuse; contradict; and hence to disregard; denounce.

If we *denyen* he schal *denye* us; if we bileeuen not he dwellith feithful he mai not *denye* himsilff. *Wiclif*, 2 Tymo. 2.

It shall be therefore a witness unto you, lest you *deny* your God. *Joshua* xxiv. 27.

And therfor, though he had thus made a realme, holy Scripture *denyid* to cal hym a kyng. *Fortesque.*

The *denial* of landing, and hasty warning us away, troubled us much. *Bacon.*

My young boy
Hath an aspect of intercession, which
Great nature cries—*deny* not. *Shakspeare.*

Here comes your father; never make *denial*:
I must and will have Catherine to my wife. *Id.*

It may be I am esteemed by my *denier* sufficient of myself to discharge my duty to God as a priest, though not to men as a prince. *King Charles.*

How unworthy is he of life, who with the same breath that he receives, denies the Giver of it. *Bishop Hall. Contemplations.*

The negative authority is also *deniable* by reason. *Browne.*

Ah, charming fair, said I,
How long can you my bliss and yours *deny?* *Dryden.*

We may *deny* God in all those acts that are capable of being morally good or evil: those are the proper scenes in which we act our confessions or *denials* of him. *South.*

The best sign and fruit of *denying* ourselves, is mercy to others. *Spratt.*

Our Saviour assures us, that if a tender mother cannot deny the son of her love any reasonable request, much less will God *deny* his Holy Spirit to them that ask him. *Clarke's Sermons.*

No man more impudent to *deny*, where proofs were not manifest; no man more ready to confess, with a repenting manner of aggravating his own evil, where *denial* would but make the fault fouler. *Sidney.*

By the word Virtue the affirmer intends our whole duty to God and man, and the *denier* by the word Virtue means only courage, or, at most, our duty towards our neighbour, without including the idea of the duty which we owe to God. *Watts.*

If you had been contented to assist him indirectly, without a notorious *denial* of justice, or openly insulting the sense of the nation, you might have satisfied every duty of political friendship. *Junius.*

It has been asserted, that, if you alter her symbols, you alter the being of the church of England. This, for the sake of the liberty of that church, I must absolutely *deny*. *Burke.*

I have gnashed
My teeth in darkness till returning morn,
Then cursed myself till sun-set;—I have prayed
For madness as a blessing—'tis *denied* me. *Byron.*

DENYS (St.) a town of France, in the department of Paris, famous for a magnificent church, built by king Dagobert, in 632; in which were the tombs of many of the French kings, of the constable Guesclin, and of marshal Turenne. In the treasury, among other curiosities, were the swords of St. Lewis, and the Maid of Orleans, and the sceptre of Charlemagne. The abbey of the Benedictines, a magnificent piece of modern architecture, has more the appearance of a palace than a convent. In 1793 the republican populace broke into the royal tombs, and greatly dilapidated the buildings. In 1806 Bonaparte caused them to be repaired, selected the church as the burying-place for his own family, and founded a chapter here of ten canons, which the Bourbons have retained with some modifications. The late prince of Condé has been interred here since the return of Louis XVIII. St. Denys is seated on the river Crould, near the Seine, five miles north of Paris, and contains 6000 inhabitants.

DEOBSTRUCT, *v. a.* } From *de* privative,
DEOBSTRU'ENT, *adj.* } and OBSTRUCT, which see. To clear away obstacles; deobstruent is, having the power to remove obstructions.

It is a singular good wound-herb, useful for *deobstructing* the pores of the body.
More's Antidote against Atheism.

Such as carry off the fæces and mucus, *deobstruct* the mouth of the lacteals, so as the chyle may have a free passage into the blood. *Arbuthnot on Diet.*

All sopes are attenuating and *deobstruent*, resolving viscid substances. *Id. on Aliments.*

DE'ODAND, *n. s.* Lat. *Deo dandum*. A thing given or forfeited to God.

Deodands are forfeitures which the ignorance and superstition of ancient times introduced and called by the name of *deodands*, from the application of them to pious uses. *Burn's Justice.*

D'EON (the Chevalier), born in 1728, at Tonnere, in Burgundy, of a respectable family, is principally distinguished for consenting to appear half his life as a woman. He received a liberal education; and, becoming an orphan, the Prince de Conti procured him a commission as a cornet of dragoons. He was employed in 1755 on a mission to Petersburg, after which he joined his regiment, and served with considerable credit in the campaigne of 1762, as aid-de-camp to Marshal Broglio. The year following he was invested with the order of St. Louis, and accompanied the duke de Nivernois to England as secretary. On the duke's leaving England, D'Eon remained in the character of minister plenipotentiary, until he was superseded by the count de Guerchy, to whom he was appointed secretary. At this arrangement he was very indignant, and published in revenge an account of the negociations in which he had been engaged; wherein he stigmatized the conduct of the count. He was prosecuted by de Guerchy for a libel in the Court of King's Bench, in July, 1764, and being found guilty absconded, and was outlawed.

In 1771 doubts were entertained concerning his sex, and bets were laid to a great amount that D'Eon was a woman. In one instance this produced an action at law, that ended in a nonsuit. The chevalier in the mean time returned to France, where he assumed (compulsorily it is said) the female dress, but for what reason exactly has never been ascertained; his conduct in this respect was certainly sanctioned by his court, which continued his pension, and suffered him to retain the cross of his order.

In 1785 D'Eon came to England, where, still appearing as a woman, he gave lessons in fencing; but when the Revolution deprived him of his pensions, he presented in June 1792 a petition to the National Assembly, in which he complained of being obliged to wear a cap and petticoats, and asked permission to resume his military uniform. His petition remained unnoticed. He now again sought an asylum in London, where he passed the latter part of his life in poor circumstances; and died in New Millman-street, May 21st, 1810. His confessor, father Elysée, discovering that the chevalier was of the male sex, after his decease invited some medical and other gentlemen to examine the corpse. He was interred in St. Pancras church-yard, where he is registered, 'Charles Genevieve Louise Auguste Andre Timothee D'Eon de Beaumont.' He is said to have been the author of L'Espion Chinois, 6 vols. 12mo.; Loisirs, 13 vols. 8vo.; Lettres, Mémoires, et Negociations particulières.

DEO'PPILATE, *v. a.* Lat. *de* and *oppilo*. To clear a passage; to free from obstructions.

Though the grosser parts be excluded again, yet are the dissolubie parts extracted, whereby it becomes effectual in *deoppilations*. *Browne's Vulgar Errours.*

A physician prescribed him a *deoppilative* and purgative apozem. *Harvey.*

DEOSCULATION, *n. s.* Lat. from *de* and *osculum* (*os*, *oris*, the mouth). Kissing.

We have an enumeration of the several acts of worship required to be performed to images, viz. processions, genufluxions, thurifications, and *deosculations*
Stillingfleet.

DEPA'INT, *v. a.* or DEPEINCT, as Spenser also writes it. Fr. *depeint*; *de*, and PAINT, which see. To picture; to describe by colors; to show by resemblance.

He did unwilling worship to the saint,
That on his shield *depainted* he did see.
Spenser.

The red rose medlied with the white y fere,
In either cheek *depeincten* lively here. *Id.*

Such ladies fair would I *depaint*.
In roundelay, or sonnet quaint. *Gay.*

DEPART', *v. a.* & *n.* & *n. s.* } Fr. *departer*;
DEPART'ER, } Span. *partirse*;
DEPART'ING, *n. s.* } It. *partisi*; from
DEPART'MENT, } Lat. *pars*, *partis*;
DEPART'URE. } a part; Heb. פרס (to divide). To separate; to part. As a neuter verb, to quit a place, taking *from* after it; to desert; to fall away; to be lost; to die; hence to desist from a practice and to revolt. Departing and departure both express the act of going away, and abandoning, or death. Department

is principally a continental division of territory, but has also a general application.

And alle folkis schulen be gederid bifore him; and he schal *departe* hem atwynne, as a scheparde *departith* scheep fro kidis. *Wiclif. Matt.* 25.

I N. take thee N. to my wedded wife, to love and to cherish, till death us *depart*.
Old Family Prayer Book, (1661).

As her soul was in *departing*; for she died.
Gen. xxxv. 18.

They *departed* quickly *from* the sepulchre, with fear and great joy, and did run to bring his disciples word. *Matt.* xxviii.

Lord, now lettest thou thy servant *depart* in peace, according to thy word. *Luke* xxix.

The chymists have a liquor called water of *de part*,
Bacon.

He, which hath no stomach to this fight,
Let him *depart*; his passport shall be made.
Shakspeare.

As you wish Christian peace to souls *departed*,
Stand these poor people's friend. *Id.*

When your brave father breathed his latest gasp,
Tidings, as swiftly as the post could run,
Were brought me of your loss and his *depart*.
Id. Henry VI.

You've had dispatch in private by the consul;
You are willed by him this evening
To *depart* Rome. *Ben Jonson.*

What besides
Of sorrow, and dejection, and despair,
Our frailty can sustain, thy tidings bring;
Departure from this happy place. *Milton.*

His majesty prevailed not with any of them to *depart* from the most unreasonable of all their demands.
Clarendon.

The fear of the Lord, and *departure from* evil, are phrases of like importance. *Tillotson.*

And couldst thou leave me, cruel, thus alone;
Not one kind kiss from a *departing* son!
No look, no last adieu! *Dryden.*

Happy was their good prince in his timely *departure*, which barred him from the knowledge of his son's miseries. *Sidney.*

The Roman fleets, during their command at sea, had their several stations and *departments*; the most considerable was the Alexandrian fleet, and the second was the African. *Arbuthnot.*

The gentlemen, his particular friends, in various *departments* of ministry, &c.
Burke. Character of Lord Chatham.

For a *departing* being's soul
The death-hymn peals, and the hollow bells knoll.
Byron.

DEPARTMENT. This word was adopted by the national assembly of France instead of province, when the ancient provinces of that kingdom were divided into departments, of which, including Corsica, there were eighty-three. These departments were much more equal in point of extent than the provinces; some of the old extensive provinces being divided into four or five departments, whilst some of the smaller ones constitute exactly one, and in some instances two provinces are included in one department. Each department has been subdivided into districts, and each district again into cantons.

DEPARTURE, in navigation, is the easting or westing of a ship in respect of the meridian it departed or sailed from; or it is the difference of longitude, either east or west, between the present meridian the ship is under, and that where the last reckoning or observation was made. This departure, any where but under the equator, must be counted according to the number of miles in a degree proper to the parallel the ship is under. The departure, in plane and Mercator's sailing, is always represented by the base of a right-angled plane triangle, where the course is the angle opposite to it, and the distance sailed is the hypothenuse; the perpendicular or other leg being the difference of latitude. And then the theorem for finding it is always this: as radius to the sine of the course; so is the distance sailed, to the departure sought.

DEPAST'URE, *v. a.* Lat. *depascor; de* and *pasco*, from Gr. $\pi\alpha\omega$. To feed; to eat up.

They keep their cattle, and live themselves, in bodies pasturing upon the mountains, and removing still to fresh land, as they have *depastured* the former.
Spenser.

DEPAU'PERATE, *v. a.* Lat. *depaupero; de* and *pauper*. To make poor; to impoverish; to consume.

To represent God in a carved stone, or a painted table, does *depauperate* our understanding of God, and dishonours him below the painter's art. *Bp. Taylor.*

Great evacuations, which carry off the nutritious humours, *depauperate* the blood. *Arbuthnot.*

DEPE'CTIBLE, *adj.* Lat. *depecto.* Tough; clammy; tenacious; capable of being extended.

It may be also, that some bodies have a kind of lentor, and are of a more *depectible* nature than oil, as we see it evident in coloration; for a small quantity of saffron will tinct more than a very great quantity of brazil or wine. *Bacon.*

DEPEND', *v. a.*
DEPEND'ANCE, *n. s.*
DEPEND'ANT, *adj.* & *n. s.*
DEPEN'DENCE,
DEPEN'DENCY,
DEPEN'DENT, *adj.* & *n. s.*

Fr. *dependre, dependance;* Span. and Port. *depender;* Lat. *dependere; de* and *pendeo*. To hang down, or from; hence, to be connected with, so as to be subject to the will of, or be supported by, another; and to be in suspense, whether of interest or attention. Dependance and dependence, the one from the older French and the other from the Latin verb, are both used in the literal as well as figurative sense.

On God, as the most high, all inferior causes in the world are *dependent*. *Hooker.*

Never be without money, nor *depend* upon the courtesy of others, which may fail at a pinch. *Bacon.*

Never was there a prince bereaved of his *dependancies* by his council, except where there hath been either an over-greatness in one counsellor, or an over-strict combination in divers. *Id.*

By no means be you persuaded to interpose yourself in any cause *depending*, or like to be *depending*, in any court of justice. *Id.*

We work by wit and not by witchcraft;
And wit *depends* on dilatory time. *Shakspeare.*

Her madness hath the oddest frame of sense;
Such a *dependency* of thing on thing,
As ne'er I heard in madness. *Id.*

A great abatement of kindness appears as well in the general *dependants*, as in the duke himself also, and your daughter. *Shakspeare.*

What shalt though expect,
To be *depender* on a thing that leans? *Id.*

How *dependant* and servile is the life of man, that cannot either want one element, or endure it corrupted. *Bishop Hall. Contemplations.*

For a six-clerk a person recommended a *dependant* upon him, who paid six thousand pounds ready money. *Clarendon.*

From the frozen beard
Long icicles *depend*, and crackling sounds are heard. *Dryden.*

They slept in peace by night,
Secure of bread, as of returning light;
And with such firm *dependance* on the day,
That need grew pampered, and forgot to pray. *Id.*

Every moment we feel our *dependance* upon God, and find that we can neither be happy without him, nor think ourselves so. *Tillotson.*

In all sorts of reasoning, the connexion and *dependance* of ideas should be followed, till the mind is brought to the source on which it bottoms. *Locke.*

We speak of the sublunary worlds, this earth, and its *dependencies*, which rose out of a chaos about six thousand years ago. *Burnet's Theory.*

The expectation of the performance of our desire, is that we call *dependence* upon him for help and assistance. *Stillingfleet.*

There is a chain let down from Jove,
So strong, that from the lower end,
They say, all human things *depend*. *Swift.*

The judge corrupt, the long *depending* cause,
And doubtful issue of misconstrued laws. *Prior.*

The direful monster was afar descried,
Two bleeding babes *depending* at her side. *Pope.*

But if you're rough, and use him like a dog,
Depend upon it—he'll remain incog. *Addison.*

We are indigent, defenceless beings; the creatures of his power, and the *dependents* of his providence. *Rogers.*

This is not like the tribute which earthly kings exact; who as much *depend* upon their subjects for the support of their power, as their subjects do upon them for the protection of their property. *Mason.*

Thus happiness *depends*, as nature shows,
Less on exterior things than most suppose. *Cowper.*

MAN. Think'st thou existence doth *depend* on time?
It doth; but actions are our epochs, *Byron.*

DEPERDITION, *n. s.* Lat. *deperdo; de* and *perdo*; Gr. *περθω*; to lose or waste. Loss; destruction.

It may be unjust to place all efficacy of gold in the non-omission of weights, or *deperdition* of any ponderous particles. *Browne.*

DEPHLE'GM, or DEPHLEG'MATE, *v. a.* DEPHLE'GMEDNESS, *n. s.* } Low Lat. *dephlegmo.* To clear from phlegm, or aqueous insipid matter.

We have sometimes taken spirit of salt, and carefully *dephlegmed* it. *Boyle.*

In divers cases it is not enough to separate the aqueous parts by *dephlegmation*; for some liquors contain also an unsuspected quantity of small corpuscles, of somewhat an earthy nature, which, being associated with the saline ones, do clog and blunt them, and thereby weaken their activity. *Id.*

The proportion betwixt the coralline solution and the spirit of wine, depends much upon the strength of the former liquor, and the *dephlegmedness* of the latter. *Id.*

DEPHLOGISTICATED AIR. See OXYGEN.

DEPICT; Lat. *depingo, depictus*, from *de* and *pingo, pictus*; to paint; describe.

The cowards of Lacedemon *depicted* upon their shields the most terrible beasts they could imagine. *Taylor.*

When the distractions of a tumult are sensibly *depicted*, every object and every occurence are so presented to your view, that, while you read, you seem indeed to see them. *Felton.*

In a cottage by night may I pass the soft time,
In the field and the meadows all day;
With the wife of my heart, whose charms, in their prime,
Depict her as blooming as May. *Brereswood.*

DEPIL'ATORY, *n. s.* DEPI'LOUS, *adj.* } Lat. *de* privative and *pilus*, the hair. That which takes off the hair. Without hair.

This animal is a kind of lizard, or quadruped, corticated and *depilous*; that is, without wool, fur, or hair. *Browne.*

DEPILATORY MEDICINES, those applied to take off the hair; such are lime, and other caustic substances, which ought to be used with great caution. Unless they destroy the skin, the roots of the hair remain unaffected, and it will grow again.

DEPLETION, *n. s.* Lat. *depleo, depletus.* The act of emptying.

DEPLORE', *v. a.* DEPLOR'ABLE, *adj.* DEPLOR'ABLENESS, *n. s.* DEPLOR'ABLY, *adv.* DEPLOR'ATE, DEPLORA'TION. } Fr. *deplorer*; Sp. and Port. *deplorar*; It. and Lat. *deplorare*, from *de* and *ploro*, to weep. To lament; mourn; bemoan; deplorable, and deplorate, lamentable; that which is to be bemoaned.

This was the *deplorable* condition to which the king was reduced. *Clarendon.*

The bill of all weapons gives the most ghastly and *deplorable* wounds. *Temple.*

But chaste Diana who his death *deplored*,
With Æsculapian herbs his life restored. *Dryden.*

The case is then most *deplorate* when reward goes over to the wrong side. *L'Estrange.*

Notwithstanding all their talk of reason and philosophy, God knows, they are *deplorably* strangers to them. *South.*

It will be considered in how *deplorable* a state learning lies in that kingdom. *Swift.*

A third's all pallid aspect offered more
The traits of sleeping sorrow, and betrayed,
Through the heaved breast, the dream of some far shore
Beloved and *deplored*. *Byron.*

DEPLUME', *v. a.* DEPLUMA'TION, *n. s.* } Lat. *deplumatio.* To pluck; offend. A pluming, or plucking off the feathers: in surgery, a swelling of the eyelids, accompanied with the fall of the hairs from the eye-brows.

DEPONE', *v. a.* DEPO'NENT, *n. s.* } Lat. *depono, de* and *pono*, to lay down. To state on oath, in law. To pledge or adventure any thing on some scheme of success. A particular kind of verb. See the extract.

In chancery—such witness (who answers interrogatories), is called a *deponent*. *Cowell.*

On this I would *depone*
As much as any cause I've known. *Hudibras.*

Such verbs as have no active voice are called *deponents*, and generally signify action only; as fateor, I confess. *Clarke's Latin Grammar.*

DEPOP'ULATE, *v. a.* & *v. n.* } Fr. *dépeupler*; It. *dispopolare*,
DEPOPULA'TOR, *n. s.* }
DEPOPULA'TION, }
from Lat. *depopulare* (*de* and *populo*), to ravage. To destroy the people of a country; to ravage. As a neuter verb, to become dispeopled. A depopulator is a destroyer or waster of inhabited countries.

He turned his arms upon unarmed and unprovided people, to spoil only and *depopulate*, contrary to the laws both of war and peace. *Bacon.*

Where is this viper,
That would *depopulate* the city, and
Be every man himself? *Shakspeare.*

How didst thou grieve then, Adam! to behold
The end of all thy offspring, and so sad
Depopulation! thee another flood,
Of tears and sorrow a flood, thee also drowned
And sunk thee as thy sons. *Milton.*

A land exhausted to the last remains,
Depopulated towns and driven plains. *Dryden.*

Grim death in different shapes
Depopulates the nations. *Philips.*

Remote thou hearest the dire effect of war,
Depopulation. *Id.*

This is not the place to enter into an enquiry whether the country be *depopulating*. *Goldsmith.*

DEPO'RT, *v. a.* & *n. s.* } Fr. *deporter*, *deportment*; Ital. *deportamento*, from Lat. *portare*; Gr. φορτω, to carry one's self. To behave, demean; generally used with a compound pronoun.
DEPORT'MENT, *n. s.* }

I will but sweep the way with a few notes, touching the duke's own *deportment* in that island. *Wotton.*

She Delia's self
In gait surpassed and goddess-like *deport*.
Milton.

The coldness of his temper, and the gravity of his *deportment*, carried him safe through many difficulties, and he lived and died in a great station. *Swift.*

Let the ambassador *deport* himself in the most graceful manner before a prince. *Pope.*

What's a fine person, or a beauteous face,
Unless *deportment* gives them decent grace?
Blessed with all other requisites to please,
Some want the striking elegance of ease.
Churchill.

DEPORTATION, Lat. *deportatio*, of *de* and *portare*.

An abjuration, which is a *deportation* for ever into a foreign land, was anciently with us a civil-death. *Ayliffe.*

DEPO'SE, *v. a.* } Fr. *deposer*; Ital. *deporre*; Span. *deponer*; Lat. *deponere*, *depositus*, from *de* and *pono*, to place. Hence, to swear, because by so doing a man deposits or pledges his faith to the truth of his declaration. To lay down, lodge; to degrade, deprive of; and generally, to lay aside, lay up.
DEPOS'ING, *n. s.* }
DEPOSI'TION. }

First, of the king; what shall of him become?
The duke yet lives that Henry shall *depose*.
Shakspeare.

There shouldst thou find one heinous article,
Containing the *deposing* of a king. *Id.*

According to our law,
Depose him in the justice of his cause. *Id.*

Love straight stood up and *deposed*, a lie could not come from the mouth of Zelmane. *Sidney.*

Its shores are neither advanced one jot farther into the sea, nor its surface raised by additional mud *deposed* upon it by the yearly inundations of the Nile. *Woodward.*

If you will examine the veracity of the fathers by those circumstances usually considered in *depositions*, you will find them strong on their side. *Sir K. Digby.*

A witness is obliged to swear, otherwise his *deposition* is not valid. *Ayliffe.*

His [James II.] conduct and the passage of Charles the Second's reign, might rankle still at the hearts of some men, but could not be set to account among the causes of his *deposition*. *Bolingbroke.*

DEPO'SITE, *v a.* & *n. s.* } For etymon, see DEPOSE. To lay up. The place of deposit is a depository; and a person in trust is a depositary.
DEPOSI'TARY, }
DEPOSI'TORY. }

I gave you all.
—Made you my guardians, my *depositaries*,
But kept a reservation to be followed
With such a number. *Shakspeare.*

The Jews themselves are the *depositories* of all the prophecies which tend to their own confusion. *Addison.*

They had since Marsellies, and fairly left it: they had the other day the Valtoline, and now have put it in *deposite*. *Bacon.*

God commands us to return as to him, to the poor, his gifts, out of mere duty and thankfulness: not to *deposit* them with him, in hopes of meriting by them. *Sprat.*

The eagle got leave here to *deposit* her eggs. *L'Estrange.*

The difficulty will be to persuade the *depositing* of those lusts, which have, by I know not what fascination, so endeared themselves. *Decay of Piety.*

DEPOSITION. The proof in the high court of chancery is by the depositions of witnesses; and the copies of such regularly taken and published, are read as evidence at the hearing. For the purpose of taking deposition in or near London, there is an examiner's office appointed; but for such as live in the country, a commission to examine witnesses is usually granted to four commissioners, two named on each side, or any three or two of them to take the depositions there. And if the witnesses reside beyond sea, a commission may be had to examine them there upon their own oaths; and if foreigners, upon the oaths of two skilful interpreters. The commissioners are sworn to take the examinations truly, and without partiality, and not to divulge them till published in the court of chancery; and their clerks are also sworn to secrecy. The witnesses may be compelled, by a process of subpœna, as in courts of common law, to appear and submit to examination; and when their depositions are taken, they are transmitted to the

court with the same care that the answer of a defendant is sent. 3 *Black.* 455.

DEPOT denotes any particular place in which military stores are deposited for the use of the army. In a more extensive sense it signifies several magazines collected together for that purpose. It is likewise applied to any particular fort or place, appropriated for the reception of recruits to detached parties, belonging to different regiments. In England, the barracks near Maidstone are depôts for the British cavalry, and Chatham is allotted to the infantry. In the time of war the greatest attention should be given to preserve the several depôts which belong to the fighting army. Hence the line of operation should invariably be connected with them; or rather no advance should be made upon that line, without the strictest regard being had to the one of communication.

DEPÔT is again used to denote a particular place at the tail of the trenches, out of the reach of the cannon of the place attacked; where the troops generally assemble, when a sally from the besieged is suspected.

DEPÔT also means a temporary magazine for forage, for fascines, gabions, tools for mining, &c., with such other articles necessary for the support of an army, or for carrying on a siege.

DEPRAVE', *v. a.* DEPRAV'ER, *n. s.* DEPRAVA'TION, DEPRAV'EDNESS, *n. s.* DEPRAVE'MENT, DEPRA'VITY. Fr. *depraver*; Span. and Portug. *depravár*; Ital. and Lat. *depravare*, from *de* and *pravus*, crooked. To corrupt, vitiate, calumniate: he who corrupts is a depraver; depravement, depravation, depravedness, and depravity a corrupt, vitiated state; depravation is used by Shakspeare for calumny.

We admire the providence of God in the continuance of scripture, notwithstanding the endeavours of infidels to abolish, and the fraudulence of heretics to *deprave*, the same. *Hooker.*

Who lives that's not *depraved*, or *depraves*?
Shakspeare.

Stubborn critics are apt, without a theme
For *depravation*, to square all the sex. *Id.*

What sins do you mean? Our original *depravedness*, and proneness of our eternal part to all evil.
Hammond.

But from me what can proceed
But all corrupt, both mind and will *depraved*?
Milton.

He maketh men believe, that apparitions are either deceptions of sight, or melancholy *depravements* of fancy. *Browne.*

A taste which plenty does *deprave*,
Loaths lawful good, and lawless ill does crave.
Dryden.

We have a catalogue of the blackest sins that human nature, in its highest *depravation*, is capable of committing. *South.*

This will be equivalent to the proposal made by Boileau to the academicians, that they should review all their polite writers, and correct such impurities as might be found in them, that their authority might not contribute at any distant time to the *depravation* of the language. *Johnson. Plan of Dictionary.*

If this be so, there must be a cause or causes for such a *depravity* in our common people. *Franklin.*

DEPRECATE, *v. a.* DEPRECATION, *n. s.* DEPRECATIVE, *adj.* DEPRECATORY, *adj.* DEPRECATOR, *n. s.* From Lat. *deprecari*, from *de* and *precor*, to pray. To pray against: to beg off, or from, apologetic.

Bishop Fox understanding that the Scottish king was still discontent, being troubled that the occasion of breaking off the truce should grow from his men, sent many humble and *deprecatory* letters to the Scottish king to appease him. *Bacon.*

I, with leave of speech implored,
And humble *deprecation*, thus replied. *Milton.*

Sternutation they generally conceived to be a good sign, or a bad one; and so, upon this motion, they commonly used a gratulation for the one, and a *deprecation* for the other. *Browne.*

In *deprecating* of evil, we make an humble acknowledgment of guilt, and of God's justice in chastising, as well as clemency in sparing, the guilty. *Grew.*

Poverty indeed, in all its degrees, men are easily persuaded to *deprecate* from themselves. *Rogers.*

The judgments which we would *deprecate* are not removed. *Smalridge.*

The Italian entered them in his prayer: amongst the three evils he petitioned to be delivered from, he might have *deprecated* greater evils.
Baker's Reflections on Learning.

DEPRE'CIATE, *v. a.* DEPRECIA'TION, *n. s.* Fr. *deprecier*, from Lat *de* priv. and *pretium* (from Gr. πρατης, a seller) an equivalent given to the seller for his goods. To bring down in price or value; the act of lessening the value of, or underrating a thing.

They presumed upon that mercy, which, in all their conversations, they endeavour to *depreciate* and misrepresent. *Addison.*

As there are none more ambitious of fame, than those who are coiners in poetry, it is very natural for such as have not exceeded in it to *depreciate* the works of those who have. *Spectator.*

It has been held, indeed, by some of the judges (but certainly not by all of them, or at least not upon all occasions), that juries in favour of life, may fairly, in fixing the value of the property, take into their consideration the *depreciation* of money, which has taken place since the statutes passed.
Sir S. Romilly.

DEP'REDATE, *v. a.* DEPREDA'TION, DEPREDA'TOR. Fr. *depreder*, from Lat. *de* and *prædor*, to rob. To pillage, spoil; devour. The substantives plainly follow this.

It maketh the substance of the body more solid and compact, and so less apt to be consumed and *depredated* by the spirits. *Bacon.*

It is reported that the shrub called our Lady's Seal, which is a kind of briony, and coleworts, set near together, one or both will die: the cause is for that they be both great *depredators* of the earth, and one of them starveth the other. *Bacon.*

The land had never been before so free from robberies and *depredations* as through his reign.
Wotton.

Were there not one who had said, Hitherto shalt thou come, and no farther; we might well expect such vicissitudes, such clashing in nature, and such *depredations* and changes of sea and land.
Woodward.

DEPREHEND, *v. a.* } Lat. *deprehendo*, from *de* and *prehendere*, to take. To catch; to take unawares; to take in the fact.
DEPREHE'NSION. }

Who can believe men upon their own authority, that are once *deprehended* in so gross and impious an imposture? *More.*

That wretched creature, being *deprehended* in that impiety, was held in ward. *Hooker.*

The motions of the minute parts of bodies, which do so great effects, are invisible, and incur not to the eye; but yet they are to be *deprehended* by experience. *Bacon.*

DEPRESS', *v. a.* & *n. s.* } Fr. *deprimer*; It. and Lat. *deprimere*, from *deorsum*, downwards, and *premere*, to press;—Minsheu. To press or push down; hence to let fall; to humble. Depressor and depriment, in anatomy, are terms applied to muscles whose action is to depress the parts to which they adhere.
DEPRESS'ION, DEPRESS'OR, DEP'RIMENT. }

Depression of the nobility may make a king more absolute, but less safe. *Bacon.*

Bricks of a rectangular form, if laid one by another in a level row between supporters sustaining the two ends, all the pieces between will necessarily sink by their own gravity; and much more, if they suffer any *depression* by other weight above them. *Wotton.*

The same thing I have tried by letting a globe rest, and raising or *depressing* the eye, or otherwise moving it, to make the angle of a just magnitude. *Newton.*

Others *depress* their own minds, despond at the first difficulty, and conclude that the making any progress in knowledge is above their capacities. *Locke.*

Passion can *depress* or raise
The heavenly, as the human mind. *Prior.*

This mournful truth is every where confessed,
Slow rises worth, by poverty *depressed*. *Johnson.*

DEPRIVE', *v. a.* } Fr. *priver*; Span. and Port. *privar*; Ital. and Lat. *privare*; from *de* and *privo*. To bereave or depossess; taking *of* after it; hence to hinder, to debar from. Deprivation has certain formal and legal applications; see below. Deprivable is that which may, in justice, be taken away.
DEPRIVA'TION, *n. s.* }
DEPRIV'ABLE, *adj.* }

God hath *deprived* her *of* wisdom, neither hath he imparted to her understanding. *Job*, xxxix. 17.

Most happy he,
Whose least delight sufficeth to *deprive*
Remembrance *of* all pains which him opprest. *Spenser.*

They gather that enjoy them, (the church's grants) possess them wrongfully, and are *deprivable* at all hours. *Hooker.*

A minister, *deprived* for inconformity, said, that if they *depriued* him, it should cost an hundred men's lives. *Bacon.*

He lamented the loss of an excellent servant, and the horrid manner in which he had been *deprived of* him. *Clarendon.*

From his face I shall be hid, *deprived*
His blessed countenance. *Milton.*

Fools whose end is destruction, and eternal *deprivation of* being. *Bentley.*

Now wretched Oedipus, *deprived of* sight,
Led a long death in everlasting night. *Pope.*

I have no hope of a future existence except that which is grounded on the truth of christianity; I wish not to be *deprived* of this hope. *Bishop Watson.*

DEPRIVATION, ECCLESIASTICAL, is of two kinds, viz. à beneficio, when for some crime a minister is for ever deprived of his living; and ab officio, when a minister is for ever deprived of his order. It is the same with deposition and degradation. It is usually for some heinous crime deserving death, and is performed by the bishop in a solemn manner. See DEGRADATION.

DEPTFORD, a town situated on the Thames, partly in the county of Kent, and partly in Surrey. It derives its name from a deep ford over the Thames, formerly used, but now cleared. It was generally known in ancient records by the name of Deptford Strond. Deptford is now a large and populous town, though it has no market, and is divided into Upper and Lower Deptford. It contains about 3000 houses, many of which are neat and well built, two churches, several meeting-houses, and two charity schools. The greatest support and consequence of Deptford arises from its excellent docks. Here the royal navy was formerly built and repaired. The storehouses, which form a square, have, in the last war, had several additional buildings: the whole yard covers thirty-one acres of ground, containing two wet docks, one single, the other double, three slips, a basin, and two ponds for masts, with the various manufactories for anchors, cables, masts, blocks, &c., and apartments for the numerous officers employed. Here the royal yachts are generally kept. Besides the national docks, there are several others belonging to shipbuilders for merchants' vessels. Near the dock formerly stood Says-Court, where Peter the Great resided for some time, and in this yard he completed his knowledge of the practical part of naval architecture. The Red-house, on the north-west side of the dock, is a large collection of warehouses and storehouses for navy provisions. At Deptford, in 1515, was first formed the society of the Trinity House, by Sir Thomas Spert. There are annually relieved by this company about 3000 poor seamen, their widows and orphans, at the expense of £6000. The governors are invested with the power of examining the mathematical classes of Christ's Hospital, and the masters of his Majesty's ships; and have the appointment of all pilots; erecting and maintaining lighthouses, buoys, beacons, &c. Their business was formerly carried on in a hall in the parish of Deptford Strond; but it is now conducted in a spacious building near the Tower, erected in 1787. This town is four miles east of London.

DEPTH, *n. s.* Belg. *diepte*; Teut. *tieff*. See DEEP. The measure of deepness; hence a deep place; the sea, an abyss, a quiet place, or season; and, figuratively, obscurity and sagacity. The plural, depths, is very frequent in the received translation of the Bible.

The *depths* have covered them: they sank into the bottom as a stone. *Exod.* xv. 5.

As for men, they had buildings in many places higher than the *depth* of the water. *Bacon.*

Thou spirit,———————Inspire,
As thou art wont, my prompted song, else mute,
And bear through height or *depth* of Nature's bounds.
Milton.

And in the *depth* of winter, in the night,
You plough the raging seas to coasts unknown.
Denham.

The false tides skim o'er the covered sand,
And seamen with dissembled *depths* betray.
Dryden.

Nor tho', in nature, *depth* and height
Are equally held infinite;
In poetry the height we know,
'Tis only infinite below. *Swift.*

There are greater *depths* and obscurities in an elaborate and well written piece of nonsense, than in the most abstruse tract of school divinity.
Addison's Whig Examiner.

It is certainly a sign of great self-ignorance, for a man to venture out of his *depth*, or attempt any thing he wants opportunity or capacity to accomplish.
Mason.

DEPUL'SION, *n. s.* } Lat. *depulsio*. A beating or thrusting away.
DEPU'LSORY, *adj.* }

DEPURE', *v. a.* } Fr. *depurer*; from
DEPU'RATE, *v. a.* & *adj.* } Lat. *depurgo*; *de*
DEPURA'TION, *n. s.* } and *purgo*. To cleanse, purify. The verbs are synonymous, and the meaning of the derivatives is plain.

It produced plants of such imperfection and harmful quality, as the waters of the general flood could not so wash out or *depure*, but that the same defection hath had continuance in the very generation and nature of mankind. *Raleigh.*

Brimstone is either used crude, and called sulphur vive; or is of a sadder color, and, after *depuration*, such as we have in magdeleons, or rolls of a lighter yellow. *Browne's Vulgar Errours.*

Chemistry enabling us to *depurate* bodies, and in some measure to analyse them, and take asunder their heterogeneous parts, in many chemical experiments we may, better than in others, know what manner of bodies we employ. *Boyle.*

Neither can any boast a knowledge *depurate* from the defilement of a contrary, within this atmosphere of flesh. *Glanville.*

DEPUTE', *v. a.* } Fr. *deputer*; Dut. *deputeren*; Span. and Port. *deputar*; Ital. and Lat. *deputare*; to judge or choose; hence *deputatus*, a person chosen. To send another; to empower another to transact one's business. A deputy is a person so sent, generally or specially.
DEPUTA'TION,
DEP'UTY.

And Absolom said unto him, See thy matters are good and right, but there is no man *deputed* of the king to hear. 2 *Sam.*

Presbyters, absent through infirmity from their churches, might be said to preach by those *deputies*, who, in their stead, did but read homilies. *Hooker.*

A man hath a body, and that body is confined to a place; but where friendship is, all offices of life are, as it were, granted to him and his *deputy*; for he may exercise them by his friend. *Bacon.*

Cut me off the heads
Of all the fav'rites that the absent king
In *deputation* left behind him here,
When he was personal in the Irish war.
Shakspeare.

He looks not below the moon, but hath designed the regiment of sublunary affairs into sublunary *deputations* *Brown.*

He exerciseth dominion over them as the vicegerent and *deputy* of Almighty God.
Hale's Origin of Mankind.

The authority of conscience stands founded upon its vicegerency and *deputation* under God. *South*

And Linus thus, *deputed* by the rest,
The heroes welcome and their thanks expressed.
Roscommon.

A bishop, by *deputing* a priest or chaplain to administer the sacraments, may remove him.
Ayliffe's Parergon.

DEQUA'NTITATE, *v. a.* from Lat. *de* and *quantitas*. To diminish the quantity of.

This we affirm of pure gold; for that which is current, and passeth in stamp amongst us, by reason of its allay, which is a proportion of silver or copper mixed therewith, is actually *dequantitated* by fire, and possibly by frequent extinction.
Browne's Vulgar Errours.

DERA'CINATE, *v. a.* Fr. *deraciner*, from *de* and *racine*, a root, from Lat. *radix*, *radicis*. To tear up by the roots.

Her fallow lees
The darnel, hemlock, and rank fumitory
Doth root upon; while that the culter rusts
That should *deracinate* such savagery. *Shakspeare.*

DERAIGN', *v. a.* } See ARRAIGN. But
DERAIGN'MENT, or } Minsheu says from either
DERAIN'MENT, *n. s.* } Fr. *desarroyer* or *desranger*, to disorder, or Norman *defrene*, 'a proofe of the deniall of a man's owne fact.' To prove, or justify.

When the parson of any church is disturbed to demand tythes in the next parish by a writ of indicavit the patron shall have a writ to demand the advowson of the tythes being in demand: and when it is *deraigned*, then shall the plea pass in the court christian, as far forth as it is *deraigned* in the king's court.
Blount.

DERANGE', *v. a.* } Fr. *desranger*, to disorder. The quotation from Blount includes a curious explanation of this word. It is of modern introduction, as to its general, but now very common, application both to disordered minds and things.
DERANGE'MENT, *n. s.* }

In some places the substantive *deraignment* is used in the very literal signification with the French disrayer, or desranger; that is, turning out of course, displacing or setting out of order; as, *deraignment* or departure out of religion, and *deraignment* or discharge of their profession, which is spoken of those religious men who forsook their orders and professions. *Blount.*

Most nations have adopted peculiar expressions, to signify the form or degree of *derangement* of intellect. The term *derangement*, which we have taken immediately from the French, and which means out of rank, or order, is metaphorically applied to the mind, to denote that its ideas are out of the rank, or order, generally preserved by intelligent beings. *Dr. Rees.*

DERA'Y, *n. s.* Fr. *desrayer*. To turn out of the right way; 'tumult; disorder; noise; merriment;' and even 'solemnity,' says Dr. Johnson, adding, truly, 'not in use.'

DERBEND, or DERBENT, a town of Persia, said to have been founded by Alexander the Great, and once the residence of the celebrated caliph Haroun-al-Raschid. The Russians took it in the year 1722, and retained possession until

1735, when it was restored to the Persians. Afterwards it was subdued and possessed by Feth Ali. In the year 1796, the empress of Russia having declared war against the Persians, count Subow entered Daghestan, at the head of an army; having reconnoitred Derbend, he ordered an assault, but the town surrendered. The highest part of the town is crowned by a fort or citadel of a triangular figure. Many of the stones used are cubes of six feet, but the ramparts are so narrow that cannon are mounted only on the towers. The entrance to the town is through an ancient iron gate. There is a tradition in the neighbourhood that the empire of the Mahommedans is to be overthrown by a yellow infidel army, which shall enter by this gate. No stranger is, therefore, permitted to enter the fortress, and a tax is taken of all strangers at the gate before mentioned. The streets of Derbend are irregular, but the town is well supplied with water from a fine, but almost ruined, aqueduct. The inhabitants consist of various eastern tribes and Jews, and amount altogether to about 4000. It is a place of little trade, but a great quantity of saffron is cultivated in the neighbourhood, and the gardens are fine. To the north-east there are some graves covered with flag-stones above the natural size of man; and many curious tombs in the vicinity. One of these, some years ago, was found to contain undecayed bones of the natural dimensions, a battle-axe, shield, and spear. The walls are built with stones as hard as marble; and near it are the remains of a wall which reached from the Caspian to the Black Sea. It is seated near the Caspian Sea, at the foot of Mount Caucasus, in long 48° 60′ E., lat. 42° 8′ N., and is now the capital of the principality or khanship of Derbend. See below. It extends, on a declivity to the margin of the shore, full three miles, and is about half a mile wide. To the west is a passage leading into the mountains, which are possessed by barbarous independent tribes. Derbend is considered one of the gates of Persia, and its name signifies, in Persian, a locked door. It is surrounded by walls and towers of considerable strength.

Derbend, a principality or khanship of Persia, bounded on the north by the river Derbak, or Kerebagh, on the south by the rivers Kur and Salian, on the east by the Caspian Sea, and on the west by the district of Talasseran. It extends about twenty miles in length by fifteen in breadth: it is mountainous and well watered. The soil is very fertile, wheat yielding twenty and rice forty fold. There are also fine grapes produced, but the wine is not good. Some silk and woollen manufactures are also carried on.

Derbend, or Derbent, a town of European Turkey, in the province of Romania, twenty miles north of Adrianople.

DERBY, or Derbyshire, an inland county of England, situated nearly in the centre of the island, and at an almost equal distance from the eastern and western seas. It is bounded on the north by Yorkshire and part of Cheshire; on the east by Nottinghamshire; on the south by Leicestershire; and on the west by Staffordshire and Cheshire. Its form is extremely irregular; but probably the figure to which it approaches the nearest is that of an inverted pyramid; this, however, is extremely arbitrary, owing to its uncommon indentations and projections. It is of considerable extent, being computed to be the twentieth in point of magnitude, and the nineteenth in point of population, of all the English counties. Its greatest length, in a direction S.S.E. to N.N.W. is about fifty-six miles and a half. Its greatest breadth, from E.N.E. to W.S.W., thirty-three miles. It contains about 972 square miles, or 622,080 statute acres. Here are six hundreds, one borough, eleven market towns, and 116 parishes. This county is in the diocese of Litchfield and Coventry, and the province of Canterbury, and is included in the midland circuit.

Prior to the Roman invasion, the site of the present county belonged to the Coritani. The Romans included it in the division named Flavia Cæsariensis; but during the time of the Anglo-Saxons it belonged to the kingdom of Mercia. The word Derby, from whence comes the name of the county, is of uncertain derivation. By the Saxons it was called Northworthig, and by the Danes Deoraby. The latter is obviously the source whence its modern name, and probably that of the river Derwent, is derived; but its precise meaning cannot now be ascertained.

The eastern and western districts, into which the Derwent naturally divides this county, are materially different, both in respect to the air, the face of the country, and the soil. The climate of the eastern division is healthy, temperate, and pleasant; but in the western district the air is much keener, and the state of the weather always more changeable. The face of the country presents, if not the most agreeable and pleasing, certainly the most varied and romantic scenery of any county in England. There is the most striking difference and contrast of features between the northern and southern parts; the former abounding with hill and dale. The country gradually rises until we come to the neighbourhood of Wirksworth, and then begins to assume that picturesque and sublime appearance which it continues to possess to its extremity. That chain of hills arises, which stretching northwards is continued in a greater or less breadth quite to the borders of Scotland, and forms a natural boundary between the east and west sides of the northern part of the kingdom. Its course in this county is inclined a little to the west. It spreads as it advances northerly, and at length fills up the whole of the north-west angle; also overflowing a little, as it were, towards the eastern parts. The hills are at first of small elevation; but, being in their progress piled one upon another, they form very elevated ground in the tract called the High Peak, though without any eminences which can rank among the loftiest mountains even of this island. The most considerable in height are the Axe-edge and the Kinder-scout mountains. Mr. Farey, in his admirable and comprehensive View of the Agriculture and Minerals of this county, has given an alphabetical list of the several mountains, hills, and eminences throughout Derbyshire, or in the borders of the adjoining counties, describing their situations, the strata on the top of each,

&c. These amount to upwards of 700 in number. This intelligent and truly scientific writer has also enumerated upwards of fifty of the principal narrow and rocky valleys or defiles with precipitous cliffs in and near to this county, describing their situations, the strata exhibited in their sides and bottoms, and the names of the most noted rocks, caverns, &c., in each. These lists are uncommonly curious and interesting. The High Peak is not, as many suppose, a high barren rock, but an extensive range of rather elevated ground, called the Peak Hundred. It is cultivated and populous.

The principal rivers of Derbyshire, beside the Derwent, are the Trent, the Dove, the Wye, the Errewash, and the Rother. The Derwent rises in the High Peak district, and leaves this county on the Leicestershire border near Wilne. The Trent enters the county from Staffordshire, a little south of Calton, and leaves it near Barton, on the confines of Leicestershire. The Dove rises a little south of Buxton, and, joining the Trent near Burton in Staffordshire, finally quits the county. The Wye, rising in the vicinity of Buxton, never leaves the county, but falls into the Derwent a few miles below Bakewell. The Errewash rises in the coal district near Alfreton, and falls into the Trent a few miles below its junction with the Derwent. The Rother rises near Chesterfield, and enters Yorkshire between Kilmarsh and Beighton. These rivers are well stocked with almost every kind of fresh-water fish. The Dove and the Trent have been long celebrated by Cotton, and still more by his invaluable friend, the pleasing and honest Isaac Walton, in his admirable book on angling. Nor has the Derwent received less honor from the pens of Darwin and Seward. This county is benefited by an extensive inland navigation. The principal canals are the following: the Grand Trunk from the Trent near Wilden-Ferry to the river Mersey near Runcorn-Gap. It was planned by the ingenious Mr. Brindley, and was begun on July 17th, 1766, and finished in May 1777. The Chesterfield Canal, another of Mr. Brindley's projects, extends from Chesterfield to the river Trent, at which it arrives a little below Gainsborough: its whole length being about forty-six miles. Langley Bridge, or Errewash Canal, extends from Langley Bridge to the Trent, opposite to the entrance of the Soar. Its length is about eleven miles. The Peak Forest Canal was completed in the year 1800. It extends about fifteen miles in length, besides a railway of six miles, from the Ashton-under-line Canal, near Duckensfield Bridge, to the basin and lime-kilns at Chapel-Milton. The railway, passing Chapel-en-le-Frith, leads to Loads-knowl limestone quarries in the Peak. Cromford Canal begins at Cromford, near Matlock, and joins the Errewash Canal at Langley Bridge: its length is about fourteen miles. Ashby-de-la-Zouch Canal, about fifty miles in length, joins the Coventry Canal at Marston Bridge, about two miles to the south of Nuneaton, and ends at Ashby-de-la-Zouch in Leicestershire. The Derby Canal commences in the Trent, at Swarkenstone Bridge; and, crossing the Trent and Mersey Canal, terminates at Little Eaton, about three miles north of Derby. The length of this branch is about eight miles and a half, with a rise of about twenty-nine feet. There is a railway branch of four miles and a half to the Smithy Houses and thence to the collieries near Derby. Another branch of this canal begins at Derby, and holds an easterly direction nearly parallel to the road leading to Nottingham, and finally joins the Errewash Canal between Long Eaton and Sandiacre: its length is eight miles and a half. This canal is forty-four feet wide at top, twenty-four at bottom, and five deep in the ebbest part.

There is an almost endless variety of soil in this county. In the northern parts very extensive peat-bogs exist. The soil in these districts consists chiefly of ligneous particles, being the roots of decayed vegetables mixed with argillaceous earth or sand, and a coaly substance derived from decayed vegetable matter. The surface presents nothing but the barren black moss, thinly covered with heath or ling. But in many parts of the Peak there is to be found what the inhabitants call a corn-loam, apparently consisting of a virgin earth impregnated with nitre. This soil is good; but the parts where it is found are counterbalanced by vast tracts of barren hills and mountains, whose sides present very little soil, being chiefly composed of rocks. In those parts of Derbyshire near the borders of Cheshire and Staffordshire these barren rocks are very high, bleak, and numerous. Indeed so uneven and rugged is almost all the road between Macclesfield in Cheshire and Buxton in this county, that it has been quaintly remarked to be—

> Up hill to Buxton all the way,
> And up hill all way back.

When the mountain is formed of the limestone, the soil, though scanty, is productive of the finer grasses, which form good pasturage for sheep. On that part which is called the East Moor, observes the Rev. D. P. Davies, a late elegant writer on the history, &c., of this county, there is scarcely any vegetation; not a dale or a glade which seems to have received the cultivating hand of man, or the fostering smile of nature. The most common soil in the southern parts is a reddish clay or marl. This soil is also found to prevail through the middle part of the extensive tract of limestone which lies on the north-west side of the county, and consists of much calcareous earth, which readily effervesces with acids. Some parts of the southern district are interspersed with small beds of sand or gravel. The large tract of country producing coal is covered with a clay of different colors; black, gray, brown, and especially yellow. This kind of soil is also found in some parts where the gritstone is met with; but there it is frequently of a black color and bituminous quality. That on the north side of the county, where the limestone prevails, is of a brown color and loose texture. The soil on the banks of the rivers and in the valleys is different from that of the adjacent parts, and has evidently been altered by the depositions from the frequent inundations. It is extremely difficult to compress the great mass of information which Mr. Farey and others have collected relative to the soils of this county. Mr. Farey's map, however, contains a delineation of the several

soils of this and the adjoining one. Those which belong to this are the following:—A very extensive tract, from Morley south, along the borders of Nottinghamshire, to the extreme boundaries of the county on the edge of Yorkshire north, consists of numerous strata of bind, clunch, shale, and other argillaceous strata, enclosing and separating seams of coal and coaly impressions of vegetables. These strata, on exposure to the air, rain, and frosts, perish and fall to different kinds of clay or loam.

The very extensive coal district, branching out of Derbyshire, north and south, into Yorkshire and a small part of Nottinghamshire, has been not unaptly denominated the Derbyshire and Yorkshire Coal Field. Mr. Farey, with his usual attention to interesting detail, has given an alphabetical list of about 500 collieries which are, or have been, worked in Derbyshire and in the bordering parts of the seven adjacent counties. Of these it appears nearly one-half are in Derbyshire.—The gravel of which these coal districts are chiefly composed, produces a clayey soil, which is indiscriminately strewed over the county, but chiefly in patches about Derby and parts bordering on Staffordshire. These patches of land are again intermixed with other patches of red marl strata, occupying the largest portion of the southern districts. The yellow limestone strata are to be found chiefly, if not entirely, in some few parts bordering on Nottinghamshire, a little above and below Bolsover, in this county. It occupies nearly 21,600 acres. The coal-measures, or strata, already mentioned, occupy altogether 190,000 acres. The gritstone and shale strata occupy, with the exceptions yet to be mentioned, a tract of land about 160,500 acres, extending rather diagonally from Duffield south to the borders of Lancashire north; and in breadth in the widest part, from about Chapel-en-le-Frith to near Dove on the borders of Yorkshire. The mineral limestone and toadstone strata occupy an unshapen mass of land, extending from Wirksworth to Castleton, being about 51,500 acres. Along the same tract of country, but more to the Staffordshire side, is also a limestone stratum, making a surface of about 40,500 acres. This limestone appears to have undergone an amazing degree of shrinking; and hence there are vast shake-holes and caverns, some of them of a tremendous and frightful depth, in various parts These natural caverns are in number about twenty-seven. It will be proper to enumerate one or two of them in this place.

Bagshaw's Cavern, or the Crystallised Cavern, in Mule-Spinner Mine, is a little south-west of Bradwell, and is 400 yards in length. Elden Hole, surrounded with a stone wall, a little north of Peak Forest Town, is a very deep hole, connecting with a vast lateral cavern below. The opening or chasm in the rock is about five yards long and three broad. The top of it is somewhat higher than the surface of the earth, with a very jagged and uneven mouth, opening into a chasm, 'steep, black, and full of horror.' This chasm has more than once been descended. It was formerly represented as altogether unfathomable, and seeming, at a certain depth, with such noxious air, that no animal could respire it without inevitable destruction. Cotton affirmed, more than a century ago, that he let down 884 yards of line, of which the last eighty yards were wet, without finding a bottom; and it has been confidently asserted, that a poor man, who was once lowered in a basket to the depth of 200 yards, on being drawn up died in a state of delirium. We cannot give a better description of the actual depth and dimensions of this singular cavern, than the following of Mr. Lloyd's, as contained in vol. xiii. of the Philosophical Transactions Abridged. Mr. Lloyd having seen several accounts of the unfathomable depth of Elden Hole, in Derbyshire, and being in that neighbourhood, he was inclined to make some enquiries about that noted place, of the adjoining inhabitants; who informed him that about fourteen or fifteen years before, the owner of the pasture in which this chasm is situated, having lost several cattle, had agreed with two men to fill it up; but finding no visible effects of their labor, after having spent some days in throwing down many loads of stones, they ventured to be let down into it, to see if their undertaking was practicable; when, on finding at the bottom a vast large cavern, they desisted from their work, as it would have been almost impossible to have procured a sufficient quantity of stones to have filled it up. On enquiry of one of these men whether there were any damps at the bottom, and being assured in the negative, Mr. L. procured two ropes of forty fathoms nearly in length, and eight men to let him down.

For the first twenty yards Mr. L. was let down, he could assist himself with his hands and feet, as it was a kind of confined slope; but after that the rock jetted out into large irregular pieces, on all the three sides next him; and on that account he met with some difficulty in passing, for about the space of ten yards more; at which depth the rope was moved at least five or six yards from the perpendicular. Thence down, the breadth was about three yards, and the length at least five or six, through craggy irregular slits of rock, which were rather dirty, and covered with a kind of moss, and pretty wet, till he came within about twelve or fourteen yards of the bottom, and then the rock opened on the east side, and he swung till he descended to the floor of the cave, where he perceived there was light enough came from the mouth of the pit, though at the distance of sixty-two perpendicular yards, to read any print. When at the bottom, he perceived that the cavern consisted of two parts; the first being a cave, in shape not much unlike that of an oven; and the latter, a vast dome of the form of the inside of a glass-house; with a small arched passage from the one to the other, through which a slope of loose stones, that have been thrown in from time to time, extends from the wall at the west side of the first dome, to almost the bottom of the second cave or dome, with such an angle, that the farther end of the cave is lower by twenty-five yards than the place where he first landed. The diameter of this cavern may be nearly fifty yards: the top he could not trace with the eye; but he had reason

to believe it extended to a vast height; for when nearly at the top of one of the incrusted rocks, at the height of about twenty yards, he could find no closure of the dome, though he then saw much farther than when he stood at the bottom.

The curiosities to be met with in the small cavern are not worth mentioning; indeed he did not meet there with any stalactitical incrustations whatever; but the wall consisted of rude and irregular fragments of rock. But among the singularities in the second cavern, he observed the following; climbing up a few loose stones on the south side, he descended again through a small slit into a little cave, four yards long and irregular, as to height not exceeding two yards; and the whole lined with a kind of sparkling stalactites, of a fine deep yellow color, with some small stalactitical drops hanging from the roof. Facing the first entrance is a most noble column, of the same kind of incrustation, above thirty yards high: and, proceeding on to the north, he came to a large stone, covered with the like matter; and under it was a hole two yards deep, lined with the same; whence sprung a rock consisting of vast solid round masses, like the former in color, though not in figure, on which he easily ascended to the height of twenty yards, and got some fine pieces of stalactites, pendent from the cragged sides which joined this rock.

After this, proceeding forward, he came to another pile of incrustations, different from the two former, and much rougher; and which was not tinged with such a yellow, but rather with a brown color; and at the top of this also is a small cavern, into which he went. The last thing he took notice of was the vast drops of stalactites, hanging like icicles from every part of the vault; some of which were as large as a man's body, and at least four or five feet long. The greatest part of the walls of the large cavern was lined with incrustations, and they were of three kinds: the first being the deep yellow stalactites; the second being a thin coating, like a kind of light stone-colored varnish on the surface of the limestone, and which glittered exceedingly by the light of the candles; and the third being a sort of rough efflorescence, every minute shoot resembling a kind of rose-flower. Having satisfied his curiosity with a view of this astonishing vault, he began to return. Fastening the rope to his body, he gave the signal to be drawn up; which he found to be a much more difficult and dangerous task than the descent, owing to his weight drawing the rope into clefts, between the fragments of the rock, which made it stick; and to his body jarring against the sides, which he could not possibly prevent with his hands. Another circumstance also increased the danger, which was, the rope loosening the stones over head, whose fall he every instant dreaded.

After writing the above, Mr. L. was informed there was formerly the mouth of a second shaft in the floor of the great cavern, somewhere under the great heap of stones; and that it was covered up by the miners, at the time when so many loads were thrown in from the top. It is reported to have gone down a vast depth farther, and to have had water at the bottom; but he did not perceive any remaining appearance of such opening himself, nor did the miners, who went down with him, say any thing about it.

Golconda is also a very large cavern, near Hopton. Poole's Hole, about half a mile S.S.W. of Buxton, is a very long cavern. The entrance is extremely narrow; but at the end of about twenty or thirty yards a spacious and lofty cavern opens, from the roof and sides of which water, continually dropping, congeals into large pillars and masses on the floor. Further up the cavern is a large suspended icicle or stalactite, denominated The Flitch of Bacon. Beyond this the cavern again becomes contracted; but a little further on it again expands, into a greater height and width, and continues so till we reach what is called Mary Queen of Scots' Pillar, a name given to a large massy column of stalactites, on account of its having been visited by that much injured princess during her stay at Buxton, when she wrote on a pane of glass at the hall:

> Buxton, whose fame thy baths shall ever tell,
> Which I, perhaps, shall see no more, farewell!

The cavern extends beyond this pillar about 100 yards, and is, from its mouth to this place, about 669 yards. Peak's Hole, near Castleton, is also a remarkable cavern, in which are several lakes or springs of water. Besides these horrid caverns there are numerous water-shallows or holes in the rocks, into which streams of water fall and disappear: in all about twenty.

Both Mr. Lloyd and the traditions of this neighbourhood, mention the appearance of water at the bottom of the several shafts. It has been conjectured that this is the continuation of a subterranean river; indeed of that very stream which runs out of the mouth of the ocean at Castleton.

Among the wonders of the Peak is Tide's or Weeden's Well, constituting one of the class which ebb and flow like the sea. That it does ebb and flow is certain; but it is at very unequal periods, sometimes not in a day or two, and sometimes twice in an hour. The basin of the spring is about a yard deep, and the same in length and breadth. When it flows, the water rises with a bubbling noise, as if the air, which was pent up within the cavities of the rock, was forcing itself a passage, and driving the water before it. It is occasionally used as a restorative.

But the great medicinal wonder of Derbyshire is Buxton Wells, the waters of which, beside their medicinal use, have this singularity, that within five feet of one of the hot springs there arises a cold one; as, indeed, in several other places in England, and other countries. These springs possess a less degree of warmth than those at Bath. The water is sulphureous, with a small quantity of saline particles, but it is not in the least impregnated with a sulphureous acid, hence they are very palatable in comparison with other medicinal waters. See BUXTON. Mr. Pennant observes, with his usual elegance:—'With joy and gratitude I this moment reflect on the efficacious qualities of the waters; I recollect with rapture the return of spirits, the flight of pain, and the re-animation of my long, long crippled rheumatic limbs.' About twelve

miles south-east of Buxton, in one of the most romantic situations of the whole kingdom, is Matlock. Here too is a medicinal bath of great value, the warm springs of which were first discovered about the year 1698. Near this place there is a petrifying spring; and the whole surrounding country is uncommonly interesting and romantic. In many respects Matlock, as a watering-place, is preferable to Buxton. Here are less bustle, noise, and dissipation.

Having dwelt at some length on the soil, &c., of this county, there is less occasion and still less room to detail its other natural productions. These chiefly consist of lead, antimony, millstones, grind-stones, marble, alabaster, alum, pit-coal, and iron, which constitute, of course the great bases of its trade. In addition, there are silk and cotton mills at Derby and Ashbourne; respectable marble works at Ashford; and considerable woollen manufactories in various parts. Malt is also made in this county in considerable quantity. It sends to parliament two members for the county, and two for the town of Derby.

There is a singular custom in this county of strewing the churches on the anniversary of the dedication of the church, or on midsummer eve, with rushes. The ancient custom of hanging up garlands of roses in the churches, with a pair of gloves cut out of white paper, which had been carried before the corpses of unmarried women at their funerals, also prevails in the neighbourhood of the Peak; and the county wakes are generally observed on the Sunday following the day of the dedication of the church or chapel, or on the saint's day after whom it is named. Druidical circles, tumuli of earth and stones, rocking-stones, rock-basins, and rude military works, attest the ancient British customs. The principal Roman remains are, an altar preserved in Haddon-Hall; some inscribed pigs of lead lately transferred to the British Museum; and the silver plate found in Risley-Park. Several Roman roads passed through the county; and stations may be traced in several places.

Sir Richard Arkwright, Brindley, Samuel Richardson, Anthony Blackwall, Flamsteed the astronomer royal, and bishop Halifax, are among the 'worthies' it has produced. The gentlemen's seats, though not numerous, are nowhere exceeded in individual splendor and romantic situation. See CHATSWORTH.

DERBY, the county town of Derbyshire, is seated on the Derwent, over which it has a handsome stone bridge. A small brook runs through it under nine stone bridges. It is large, populous, and well built; containing five churches, of which All Saints is the chief, the tower of which is 178 feet in height, the upper part being richly ornamented. The interior is particularly light, elegant, and spacious. The roof is supported by five columns on each side; the windows are large and handsome, and the symmetry and proportions of the whole building have a very pleasing effect. In ancient writings this church is called All-Hallows, which name it still retains among the common people. It was originally a free collegiate chapel, and besides the master or rector, who was the dean of Lincoln, had seven prebendaries. The county hall, county gaol, infirmary, an elegant assembly room, and a theatre, are the other principal buildings. The county hall is a handsome stone building, erected in the year 1730. In 1734 a machine was erected here by Sir Thomas Lombe, for the manufacturing of silk, the model of which he brought from Italy at the risk of his life. It was the first of its kind erected in England; and its operations are to wind, double, and twist the silk, so as to render it fit for weaving. It has employed many hands in the town. When Sir Thomas's patent expired, in 1732, parliament was so sensible of the value and importance of the machine that they granted him a further recompense of £14,000, for the hazard and expense he had incurred in introducing and erecting it, upon condition that he should allow an exact model of it to be taken. This model is deposited in the Tower of London. Derby has a considerable manufactory of silk, cotton, and fine worsted stockings; and a fabric of porcelain equal, if not superior, in quality to any in the kingdom. Several hands are employed in the lapidary and jewellery branches; and the work of this kind, executed here, is in high estimation. Derbyshire spar and marble, as well as foreign marble, are also wrought here into various ornamental articles. The malting trade is extensively carried on in this town. It is governed by a mayor, nine aldermen, &c. The aldermen are appointed for life, unless removed for ill behaviour. The recorder is chosen by the corporation, who can remove him at pleasure. The common-clerk is coroner and clerk of the peace, and is likewise chosen by the corporation; but both these officers must be approved of by his majesty. This town sends two members to parliament, who are elected by the corporation, freemen, and sworn burgesses; the mayor is the returning officer. A court of record is held here every second Tuesday, besides the quarter sessions, and a half-yearly court-leet.

The Derby General Infirmary is an excellent institution, situated near the London road, in a healthful, airy, and dry situation, abounding with good water. The building is constructed of a beautiful hard white stone, of a handsome, yet simple elevation, of three stories, containing a light central hall, with a double stair-case. Here the iron dome, the wide stone gallery, and the very large stone stair-case resting upon the perforated floor of the hall, which covers part of the basement story, excite admiration from their well known strength and solidity. This infirmary possesses a degree of perfection unknown to similar establishments; for instance, in the construction of two light and spacious rooms, one for each sex, called day, or convalescent rooms, where persons recovering, instead of being confined to the same room day and night, as has been the usual practice, may eat their meals and pass the day. Here is also a fever house, where relief is administered, in case of infectious diseases. The entrance to this is directly opposite to the front, and has no internal connexion with the infirmary. Besides the convalescent rooms, and the fever house, superior accommodations are provided for patients laboring under acute diseases in general; these consist of four small wards, containing one, two, three, and four beds respectively, with a

water-closet, nurse's bed-room, and scullery. This arrangement enables the medical men to separate the diseases from each other, as may best suit their natures; and the wards being parted off from the body of the house by folding doors, silence is obtained, and too much light excluded (essential in some cases), rendering this part of the establishment more convenient, perhaps, on the whole than many private houses. Another contrivance is, that ventilation shall be copious, and the warmth regulated at pleasure: and with respect to water-closets, to prevent the draft from the house being reversed, a mode of construction has been invented which does away every objection. A small steam engine is used to pump water, wash, &c. A statue of Esculapius, indicating the object of this useful institution, is placed upon the centre of the dome. The building is calculated to hold upwards of 100 patients. Three physicians, four surgeons, and a house apothecary, have been appointed to the institution since it was opened for relief of in and out patients in June 1810.

The ordnance depôt is situated near the infirmary, and was erected, according to a plan of Mr. Wyatt's, in 1805. It consists of an armory in the centre, calculated to contain 15,000 stand of arms. Above this is a room of the same proportions, containing accoutrements for the use of the army. On the north and south sides are two magazines, capable of containing 1200 barrels of ammunition. Four dwellings are situated in the angles of the exterior wall; two of which are barracks, and the other two are the residences of officers in the civil department.

Derby, as the centre of the literature of the county, and the scene of many of its improvements, has given birth to, and still boasts, many excellent literary institutions and libraries. The Derby Philosophical Society, the object of which is, the promotion of scientific knowledge by occasional meetings and conversation, and by the circulation of books, was founded by Dr. Darwin, who spent the last twenty years of his life in this neighbourhood. The first meeting, in the year 1788, was at Dr. Darwin's house; and he retained the chair of this society till his decease. It boasts a considerable number of members, and is in possession of an extensive and valuable library.

Another flourishing institution made its appearance here in the year 1808, under the title of the Derby Literary and Philosophical Society. The objects of this association are, 'the pursuit of literary and scientific enquiries, and the improvement of its members in the power of gaining and of communicating knowledge.' The means by which these objects are attempted to be accomplished are the production and discussion of papers, or essays, which may be written on any subject connected with literature or science, excluding only the practical departments of medicine and surgery, party politics and religion. It is a fundamental law of this society, that each member shall furnish an essay in his turn, and no instance has hitherto occurred in which this rule has been violated. The meetings are held monthly from September to April inclusively, one paper being read, and another discussed, on each evening. These are the principal institutions, but there are eight or ten others in the town, and one exclusively devoted to the cultivation of French literature. Derby has a market on Wednesday and Friday. It is situated in a fine plain, opening as it advances southward into a beautiful and highly cultivated country. It is thirty-six miles north of Coventry, and 126 north-west by west of London.

DERBY, a town of the United States, in Orleans county, Vermont, on the north line of the state, and on the east shore of lake Memphremagog.

DERBY, a town of New Haven county, Connecticut, on the point of land formed by the confluence of Naugatuck and Housatonick rivers. This town was settled in 1665, under New Haven jurisdiction, and has an academy.

DERBY, a town of Pennsylvania, in Chester county, seven miles from Chester, and five from Philadelphia. It is situated on Derby Creek, which falls into Delaware River, near Chester.

DERBY, WEST, a township of England, in the county of Lancaster, four miles from Liverpool, and containing about 3000 inhabitants.

To DERE, *v. a.* Sax. ᵭeꝛian. To hurt. See DARE. Obsolete.

> So from immortal race he does proceed,
> That mortal hands may not withstand his might;
> Dred for his *derring* doe, and bloody deed;
> For all in blood and spoil is his delight.
> *Faerie Queene.*

DEREHAM, or MARKET DEREHAM, a market town of Norfolk, sixteen miles north from Norwich, and 100¼ N.N.E. from London. This is a clean and well paved place, and stands on a small rivulet which supplies it with water. The church is a very ancient structure, and the steeple is open to the body like that of a cathedral: it contains four chapels, one of which, St. Edmunds, contains an antique chest, taken out of the ruins of Beckenham Castle, in which are deposited the records of the church. The font, erected in 1468, is a fine specimen of ancient sculpture, being richly carved. In the churchyard stands a square tower containing a peal of bells. In this church the poet Cowper was buried in 1800. Here are also three respectable meeting-houses. This town has sustained considerable damage by fires; first in the year 1581, when nearly the whole town was destroyed; and again in 1679. The market is on Friday, well stocked with provisions, and the greatest pig market in the county.

DERELICT', *n. s.* & *adj.* } Lat. *derelictus*,
DERELIC'TION, *n. s.* } *de* and *relinquo*, *linquo*, to leave. Terms first applied to property voluntarily relinquished or forsaken: hence to any other abandonment or forsaking; to emptiness; and figuratively to the mind.

> There is no other thing to be looked for, but the effects of God's most just displeasure, the withdrawing of grace, *dereliction* in this world, and in the world to come confusion. *Hooker.*

> *Derelict* lands, suddenly left by the sea, belong to the king: but if the sea shrink back so slowly that the gain be by little and little, it shall go to the owner of the lands adjoining.
> 2 *Comm.* 261, quoted by Jacobs.

They easily prevailed, so as to seize upon the most vacant, unoccupied, and *derelict* minds of his [lord Chatham's] friends. *Burke.*

DERELICTS imply, also, such lands as the sea, by receding from them, leaves dry and fit for cultivation. If they are left by a gradual recess of the sea, they are adjudged to belong to the owner of the adjoining lands; but when an island is formed in the sea, or a large quantity of new land appears, such derelict lands belong to the king.

DERHAM (Dr. William), a celebrated English divine, born in 1657. In 1682 he was presented to the vicarage of Wargrave in Berkshire, and, in 1689, to the rectory of Upminster, Essex. Applying himself with great eagerness to natural and experimental philosophy, he soon became a distinguished member of the Royal Society, whose Philosophical Transactions contain a great variety of curious and valuable pieces, the fruits of his industry. In his younger years he published his Artificial Clock-maker, which has been often reprinted: and in 1711, 12, and 14, he delivered the Boyle's Lectures, which he afterwards digested under the well-known titles of Physico-Theology and Astro-Theology; or a Defence of the being of a God from a Survey of the Works of Creation and of the Heavens. He next published Christo-Theology, a demonstration of the divine authority of the Christian religion. He died at Upminster in 1735, and left a valuable collection of curiosities, particularly specimens of English birds and insects.

DERI'DE, *v. a.* / DERI'DER, *n. s.* / DERI'SION, / DERI'SIVE, *adj.* / DERI'SORY. } Ital. and Lat. *deridere*, from *de* and *rideo*. To laugh; to mock with laughter; to scorn. Derisive and derisory seem synonymous adjectives.

I am in *derision* daily; every one mocketh me. *Jer.* xx. 7.

Upon the wilful violation of oaths, execrable blasphemies, and like contempts offered by *deriders* of religion, fearful tokens of divine revenge have been known to follow. *Hooker.*

The faith of the righteous cannot be so much *derided*, as their success is magnified. *Bishop Hall. Contemplations.*

Ensnared, assaulted, overcome; led bound,
Thy foe's *derision*, captive, poor, and blind,
Into a dungeon thrust. *Milton.*

What shall be the portion of those who have *derided* God's word, and made a mock of every thing that is sacred and religious? *Tillotson.*

O'er all the dome they quaff, they feast;
Derisive taunts were spread from guest to guest,
And each in jovial mood his mate addressed. *Pope.*

Are we grieved with the scorn and *derision* of the profane? Thus was the blessed Jesus despised and rejected of men. *Rogers.*

Some, that adore Newton for his fluxions, *deride* him for his religion. *Berkley.*

I know that expectation, when her wings are once expanded, easily reaches heights which performance never will attain; and when she has mounted the summit of perfection, *derides* her follower, who dies in the pursuit. *Johnson. Plan of Dictionary.*

DERIV'E, *v. a.* & *v. n.* / DERIV'ABLE, *adj.* / DERIV'ATION, *n. s.* / DERIV'ATIVE, *n. s.* & *adj.* / DERIV'ATIVELY, *adv.* / DERIV'ER, *n. s.* } Fren. *deriver*; Span. and Port. *derivar*; Ital. and Lat. *derivare*, to draw water, from *de* and *rivus*; Heb. ריה, a stream. Hence to draw or trace from a source; and as a neuter verb to come from; to owe origin to. Derivable is traceable, to or from; hence deducible in argument. Derivation, literally, a drainage of water, and a drawing out, or displaying words or ideas from their original sources; the drawing out a peccant humor of the body; and the thing drawn out, or derived. Derivative is used as a substantive in this last sense.

Though not in word nor deed ill meriting,
Is from her knight divorced in despayre,
And her dew loves *deryv'd* to that vile witchers snayre.
Spenser. Faerie Queene.

Christ having Adam's nature as we have, but incorrupt, *deriveth* not nature, but incorruption, and that immediately from his own person, unto all that belong unto him. *Hooker.*

I am, my lord, as well *derived* as he,
As well possest. *Shakspeare.*

For honour,
'Tis a *derivative* from me to mine,
And only that I stand for. *Id.*

The streams of the publick justice were *derived* into every part of the kingdom. *Davies.*

By which I knew the time,
Now full, that I no more should live obscure;
But openly begin, as best becomes
The authority which I *derived* from Heaven.
Milton.

As it is a *derivative* perfection, so it is a distinct kind of perfection from that which is in God. *Hale.*

They endeavour to *derive* the varieties of colors from the various proportion of the direct progress or motion of these globules to their circumvolution, or motion about their own centre. *Boyle.*

The word Honestus originally and strictly signifies no more than creditable, and is but a *derivative* from Honor, which signifies credit or honour. *South.*

Such a one makes a man not only a partaker of other men's sins, but also a *deriver* of the whole intire guilt of them to himself. *Id.*

Men *derive* their ideas of duration from their reflection on the train of ideas they observe to succeed one another in their own understandings. *Locke.*

Most of them are the genuine *derivations* of the hypothesis they claim to. *Glanville.*

Among other *derivatives* I have been careful to insert and elucidate the anomalous plurals of nouns and preterites of verbs. *Johnson. Preface to Dictionary.*

Here is the fountain of truth, why do you follow the streams *derived* from it by the sophistry, or polluted by the passions of man? *Bishop Watson.*

The mind that is immortal—it *derives*
No colour from the fleeting things without;
But is absorbed in sufferance or in joy,
Born from the knowledge of its own desert.
Byron.

DERNIE'R, *adj.* Last. Is a French word, used only in the following phrase.

In the Imperial Chamber, the term for the prosecution of an appeal is not circumscribed by the term of one or two years, as the law elsewhere requires in the empire; this being the *dernier* resort. *Ayliffe.*

The court of *dernier* resort is the peerage of England. *Franklin.*

DERMESTES, in zoology, a genus of insects belonging to the order of coleoptera. The antennæ are clavated, with three of the joints thicker than the rest; the breast is convex; and the head is inflected below the breast. Many varieties of this genus, as well as their larvæ, are to be met with in dried skins, bark of trees, wood, seeds, flowers, the carcases of dead animals, &c. There are eighty-seven species, of which the following are the most remarkable: D. domesticus varies greatly in size and color, some being found of a dark brown, others of a much lighter hue. The form of it is oblong, almost cylindrical. The elytra are striated, the thorax is thick and rather gibbous. This little animal, when touched, draws in its head under its thorax, and its feet beneath its abdomen, remaining so motionless that one would think it dead. This is the insect which makes in wooden furniture those little round holes that reduce it to powder. D. ferrugineus is the largest of the genus; its color is a rusty iron, having many oblong, velvet black spots upon the elytra, which give the insect a gloomy, yet elegant appearance. D. lardarius, of an oblong form and of a dim black color, easily distinguishable by a light brown stripe that occupies transversely almost the anterior half of the elytra. That color depends on small gray hairs situated on that part. The stripe is irregular at its edges, and intersected through the middle by a small transversal streak of black spots, three in number, on each of the elytra, the middlemost of which is somewhat lower than the rest, which gives the black streak a serpentine form. Its larva, which is oblong, somewhat hairy, and divided into segments alternately dark and light colored, gnaws and destroys preparations of animals preserved in collections, and even feeds upon the insects; it is also to be found in old bacon. This species may be destroyed by arsenic. D. violaceous, a beautiful little insect: its elytra are of a deep violet blue. The thorax is covered with greenish hairs, the legs are black. The whole animal's being of a glittering brilliancy renders it a pleasing object. The larva, as well as the perfect insect, inhabits the bodies of dead animals.

DERMODY (Thomas), an English poet, was born in the south of Ireland in 1775. His father was a schoolmaster at Ennis, and employed him, when only nine years old, in teaching the Latin and Greek languages. He, however, ran away from home at an early age, and enlisted as a common soldier. Having obtained the notice of the present marquis of Hastings, that nobleman procured him a commision; but his conduct was most dissipated, and rendered all efforts to serve him abortive. A volume of his poems appeared in 1800; and another was published in 1802, in which year he died, at Sydenham in Kent, of disease brought on by his vices. His pieces have since been collected and published by Mr. Raymond.

DER'OGATE, *v. a., v. n.* & *adj.*
DER'OGATELY, *adv.*
DEROGA'TION, *n. s.*
DEROG'ATIVE, *adj.*
DEROG'ATORY, *adj.*
DEROG'ATORILY, *adv.*
Fr. *deroger*; Span. and Port. *derogar*; It. and Latin, *derogare*, from *de* and *rogo*, to demand. To act so as to diminish the legal force of a prior act, law, or custom; hence to disparage generally: and, as a neuter verb, to detract; lessen reputation; degenerate. The adjective means degenerated; degraded. Derogative and derogatory mean detractious; dishonorable.

So surely he is a very brave man, neither is that any thing which I speak to his *derogation*; for in that I said he is a mingled people, it is no dispraise. *Spenser on Ireland.*

We should be injurious to virtue itself, if we did *derogate* from them whom their industry hath made great. *Hooker.*

Is there no *derogation* in it?
—You cannot *derogate*, my lord. *Shakspeare.*

Into her womb convey sterility;
Dry up in her the organs of increase,
And from her *derogate* body never spring
A babe to honour her. *Id. King Lear.*

The wisest princes need not think it any diminution to their greatness, or *derogation* to their sufficiency, to rely upon counsel. *Bacon.*

By several contrary customs and stiles used here, many of those civil and canon laws are controuled and *derogated*. *Hale.*

That spirits are corporeal, seems to me a conceit *derogative* to himself, and such as he should rather labour to overthrow; yet thereby he establisheth the doctrine of lustrations, amulets, and charms. *Browne's Vulgar Errours.*

That which enjoins the deed is certainly God's law; and it is also certain, that the scripture, which allows of the will, is neither the *derogation* nor relaxation of that law. *South.*

These deputed beings are *derogatory* from the wisdom and power of the Author of Nature, who doubtless can govern this machine he could create, by more direct and easy methods than employing these subservient divinities. *Cheyne.*

None of these patriots will think it a *derogation* from their merit to have it said, that they received many lights and advantages from their intimacy with my lord Somers. *Addison.*

DEROGATORY CLAUSE, in a testament, is a certain sentence, cipher, or secret character, which the testator inserts in his will, and of which he reserves the knowledge to himself alone, adding a condition, that no will he may make hereafter is to be reckoned valid, if this derogatory clause is not inserted expressly and word for word. It is a precaution invented by lawyers against latter wills extorted by violence or obtained by suggestion.

DERRY, a township of the United States, in Dauphin county, Pennsylvania, situated on the east side of Swatara Creek, two miles above its confluence with the Susquehannah, and celebrated for its curious cave. Its entrance is under a high bank, nearly twenty feet wide, and about eight or ten feet in height. It descends gradually nearly to a level with the creek. Its

apartments are numerous, of different sizes, and adorned with stalactites curiously diversified in size and color.

DER'VIS, *n. s.* Fr. *dervis*, from Per. *dervish*. See the article below. A priest or monk among the Turks.

> Even there, where Christ vouchsafed to teach,
> Their *dervises* dare an impostor preach. *Sandys.*

> The *dervis* at first made some scruple of violating his promise to the dying brachman; but told him, at last, that he could conceal nothing from so excellent a prince. *Spectator.*

Dervis, or Dervich, a name given to a sort of monks among the Turks, who lead a very austere life, and profess extreme poverty; though they are allowed to marry. The word originally signifies a beggar, or a person who has nothing; and because the religious, and particularly the followers of Mevelava, profess not to possess any thing, they call both the religious in general, and the Mevelavites in particular, dervises. There are in Egypt several kinds: those that are in convents are a kind of religious order and live retired; though there are of these some who travel and return again to their convents. Some take this character, and yet live with their families, and exercise their trades: of this kind are the dancing dervises at Damascus, who go once or twice a week to a little uninhabited convent, and perform their extraordinary exercises. There is a third sort of them who travel about the country, and beg, or rather oblige people to give, for whenever they sound their horn something must be given them. The people of these orders, in Egypt, wear an octagonal badge, of a greenish white alabaster, at their girdles, and a high stiff cap without any thing round it. The dervises in Persia, are called abdals, servants of God. See Abdals. The dervises called Mevelavites are a Mahommedan order of religious; the chief or founder of which was one Mevelava. They are very numerous. Their chief monastery is that near Cogni in Natolia, where the general makes his residence, and where all the assemblies of the order are held; the other houses being all dependent on this, by a privilege granted to this monastery under Ottoman I. These dervises affect humility and charity. They always go bare-legged and open-breasted, and frequently burn themselves with hot irons, to inure themselves to patience. They always fast on Wednesdays, eating nothing on those days till after sun-set. Tuesdays and Fridays they hold meetings, at which the superior presides. One of them plays all the while on a flute, and the rest dance, turning their bodies round and round with the greatest swiftness imaginable. This practice they observe with great strictness, in memory, it is said, of Mevelava their patriarch turning miraculously round for the space of four days, without any food or refreshment, his companion Hamsa playing on the flute; after which he fell into an ecstacy, and therein received revelations for the establishment of his order. They believe the flute an instrument consecrated by Jacob and the shepherds of the Old Testament, because they sang the praises of God upon it. They profess poverty, chastity, and obedience; but if they choose to go out and marry, they are always allowed. The generality of dervises are mountebanks: some apply themselves to legerdemain, postures, &c., to amuse the people; others pretend to sorcery and magic: but all of them, contrary to Mahomet's precept, are said to drink wine, brandy, and other strong liquors, to give them the degree of gaiety their order requires. The dervises are great travellers; and, under pretence of preaching, and propagating their faith, are continually passing from one place to another: on which account they have been frequently used as spies.

Derwent, a rapid river of the county of Cumberland, rising in Borrowdale, from whence it emerges to form a lake. It receives the Cocker at Cockermouth, after which it falls into the Irish sea at Workington.

Derwent, a second river of England, which runs into the Ouse, five miles south-east of Selby, in the county of York. 3. A river of England, which rises in Northumberland, and flows into the Tyne, about three miles above Newcastle. 4. A river of England which rises in the northern part of the county of Derby, and is formed of several streams, one of which issues from the cavern of Castleton. It forms one of the principal ornaments of the magnificent seat of Chatsworth and afterwards falls into the Trent, eight miles E. S. E. of Derby.

Derwent Fells; a chain of mountains in Cumberland, reckoned among the loftiest in England. One of them is celebrated for its mines of black lead, from which, for its superior quality, great part of Europe and America are supplied. In travelling through the valley of Borrowdale, amongst these mountains, they exhibit to the admirer of nature's romantic beauties, the representation of a stormy ocean; the numerous distant hills appearing like so many waves rising and undulating behind each other. The immense masses of rugged rocks, however, abruptly broken off here and there, occasionally start up to dispel the illusions of fancy; and, together with the trees, villages, farms, and cattle, which he discovers as he proceeds, serve to convince the traveller that he is still on terra firma.

Derwent Water, or the Lake of Keswick, a beautiful lake of Cumberland, in the vale of Keswick, lying between the mountain of Skiddaw on the north and the craggy hills of Borrowdale on the south, whence it derives its chief supplies of water. See Cumberland.

DESAGULIERS (John Theophilus), a Protestant divine, born at Rochelle in 1683. He was educated at Christ Church, Oxford; where he succeeded Dr. Keill in reading lectures on experimental philosophy at Hart Hall. The duke of Chandos made Dr. Desaguliers his chaplain, and presented him to the living of Edgware, near his seat at Cannons: he was afterwards chaplain to Frederic prince of Wales. He introduced the practice of reading public lectures on experimental philosophy, in London, and continued them with great success to the time of his death in 1749. He communicated many curious papers to the Philosophical Transactions; published a valuable Course of Experimental Philosophy, in 2 vols, 4to; and edited

an edition of Gregory's Elements of Catoptrics and Dioptrics, with an Appendix on Reflecting Telescopes, 8vo. He was also a member of several foreign academies.

DESAIX (Louis Charles Anthony), a celebrated French general, born near Riom, in 1768. At an early age he made choice of the military life, and before the revolution had arisen to the rank of lieutenant. In the republican army he was first employed as aid-de-camp to general Custine. He displayed great bravery at the battle of Lauterbourg, where, though severely wounded, he kept the field, rallying the disordered battalions. Having been successively created general of brigade and of division, he contributed, very considerably, to the famous retreat of Moreau. At the battle of Rastadt he commanded the left wing of the French army, obliging the archduke Charles to fall back; and he afterwards heroically defended the bridge of Kehl, where he was severely wounded. He accompanied Buonaparte into Egypt, where he was appointed governor of the upper part of the country. Having signed the treaty of El Arish with the Turks and English, he returned to Leghorn, but was detained there as a prisoner of war by admiral lord Keith. Upon obtaining his parole he returned to France, and accompanied Buonaparte to Italy. He was killed at the battle of Marengo, June 14th, 1800.

DESAQUADERO, a river of South America, in Peru, over which the Ynca Huana Capac built a bridge of flags and rushes, to transport his army to the other side, and which remained a few years since.

DESART, or DESERT, a large extent of country entirely barren, and producing nothing. In this sense some are sandy desarts; as those of Lop, Xamo, Arabia, and several others in Asia; in Africa, those of Libya and Zara: others are stony, as the desart of Paran in Arabia Petræa. The Desart, peculiarly so called in Scripture geography, is that part of Arabia south of the Holy Land, where the children of Israel wandered forty years. See DESERT.

DE'SCANT, *v. n.*, & *n. s.* Span. and Ital. *discanto*, from Lat. *de* and *canto*, to sing. The verb seems formed in our language from the noun, which signifies a song or tune, in parts; a harmony for different voices or instruments: hence, a discourse consisting of various parts; and to sing in various parts. To discourse; declaim; generally used in the latter sense, contemptuously.

Nay, now you are too flat,
And mar the concord with too harsh a *descant*.
Shakspeare.

Look you get a prayer-book in your hand,
And stand between two churchmen, good my lord;
For on that ground I'll build a holy *descant*. *Id.*

The wakeful nightingale
All night long her amorous *descant* sung.
Milton.

Comest thou for this, vain boaster, to survey me,
To *descant* on my strength, and give thy verdict?
Id.

Kindness would supplant our unkind reportings, and severe *descants* upon our brethren.
Government of the Tongue.

A virtuous man should be pleased to find people *descanting* upon his actions, because, when they are thoroughly canvassed and examined, they turn them to his honour. *Addison.*

DESCANT, in music, signifies the art of composing in several parts. Descant is three-fold, viz. double, figurative, and plain. Double descant is when the parts are so contrived, that the treble, or any high part, may be made the bass; and, on the contrary, the bass the treble. Figurative or florid descant is that part of an air of music wherein some discords are concerned, as well, though not so much, as concords. This may be termed the ornamental and rhetorical part of music, in regard that there are introduced all the varieties of points, syncopes, diversities of measure, and whatever is capable of adorning the composition. Plain descant is the ground-work and foundation of all musical compositions, consisting altogether in the orderly placing of many concords answering to simple counterpoint.

DESCEND', *v. a.* & *v. n.* DESCEND'ANT, *n. s.* DESCEND'ENT, *adj.* DESCEND'IBLE, DESCEN'SION, *n. s.* DESCEN'SIONAL, *adj.* DESCENT', *n. s.* } Fr. *descendre*, Span. *descender*, Ital. *discendere*; Lat. *descendere*, from *de* privative, and *scandere*, to clamber. To walk downwards; or cling as to a rope, going downwards. As a neuter verb, to fall, or sink, or go downwards: hence, to be derived from, and to come in order of inheritance. A descendant is applied to offspring, near or remote: descendent, falling, sinking; derived from: descendible, that which may be descended, or may descend. Descension, figuratively, a degradation, or a declension.

He shall *descend* into battle and perish.
1 *Sam.* xxvi. 10.

The rain *descended*, and the floods came, and the winds blew, and beat upon that house; and it fell not, for it was founded upon a rock.
Matthew vii. 25.

Then all the sons of these five brethren reigned,
By due success, and all their nephews late,
Even thrice eleven *descents* the crown retained,
Till aged Heli by due heritage it gained.
Faerie Queene.

No man living is a thousand *descents* removed from Adam himself. *Hooker.*

The *descendants* of Neptune were planted there.
Bacon.

I give my voice on Richard's side,
To bar my master's heirs in true *descent*!
God knows, I will not do it. *Shakspeare.*

From a god to a bull! a heavy *descension*.
It was Jove's case. From a prince to a 'prentice a low transformation: that shall be mine. *Id.*

He ended, and they both *descend* the hill;
Descended Adam to the bower, where Eve
Lay sleeping. *Milton.*

The care of our *descent* perplexes us most,
Which must be born to certain woe. *Id*

The duke was general himself, and made that unfortunate *descent* upon the Isle of Rhee, which was attended with a miserable retreat, in which the flower of the army was lost. *Clarendon.*

According to the customs of other countries, those honorary fees and infeudations were *descendible* to the eldest, and not to all the males.

Hale's Common Law of England.

There is a regress of the sap in plants from above downwards; and this *descendent* juice is that which principally nourishes both fruit and plant.

Ray on the Creation.

A foreign son upon the shore *descends*,
Whose martial fame from pole to pole extends.

Dryden.

He cleft his head with one *descending* blow. *Id.*

O, true *descendant* of a patriot line,
Vouchsafe this picture of thy soul to see. *Id.*

Turnus, for high *descent* and graceful mien,
Was first, and favoured by the Latian queen. *Id.*

Should we allow that all the property, all the estate of the father ought to *descend* to the eldest son; yet the father's natural dominion, the paternal power, cannot *descend* unto him by inheritance. *Locke.*

Observing such gradual and gentle *descents* downwards, in those parts of the creation that are beneath men, the rule of analogy may make it probable, that it is so also in things above. *Id.*

Foul with stains
Of gushing torrents and *descending* rains.

Addison.

In the midst of this plain stands a high hill, so very steep, that there would be no mounting or *descending* it, were not it made up of a loose crumbled earth.

Id.

Oblique *descension* is the arch of the equator, which *descends* with the sign below the horizon of an oblique sphere. *Ozanam.*

Why do fragments, from a mountain rent,
Tend to the earth with such a swift *descent?*

Blackmore.

He revealed his own will, and their duty, in a more ample manner than it had been declared to any of my *descendants* before them. *Atterbury.*

More than mortal grace
Speaks thee *descendant* of etherial race. *Pope.*

Despair *descends* from a mean original; the offspring of fear, laziness, and impatience.

Collier against Despair.

Descend from heaven, immortal Dove,
Stoop down and take us on thy wings. *Watts.*

And now a fourth with seraph-beauty bright,
Descends, accosts them, and outshines the light!

Darwin.

Descent, in heraldry, is used to express the coming down of any thing from above; as, a lion en descent is a lion with his head towards the base points, and his heels towards one of the corners of the chief, as if he were leaping down from some high place.

Descent, or hereditary succession, in law, is the title whereby a man, on the death of his ancestor, acquires his estate by right of representation, as his heir at law. An heir, therefore, is he upon whom the law casts the estate immediately on the death of the ancestor; and an estate so descending to the heir is in law called the inheritance. See Inheritance. Descent is either lineal or collateral. Collateral descent is that springing out of the side of the line or blood; as from a man to his brother, nephew, or the like. See Consanguinity. Lineal descent is that conveyed down in a right line from the grandfather to the father, from the father to the son, and from the son to the grandson, &c.

Descent of Dignities. A dignity differs from common inheritances, and goes not according to the rules of the common law: for it descends to the half blood: and there is no coparcenership in it, but the eldest takes the whole. The dignity of peerage is personal, annexed to the blood; and so inseparable, that it cannot be transferred to any person, nor surrendered even to the crown: it can move neither forward nor backward, but only downward to posterity; and nothing but corruption of blood, as if the ancestor be attainted of treason or felony, can hinder the descent to the heir.

DESCRIBE', *v. a.* } Fr. *descrire;* Span. *describer;* Ital. *descrivere;* Lat. *describere*, from *de*, concerning, and *scribere*, to write. To delineate; trace out; distribute a thing or country into its parts: description is both the act and form of describing. Descrive is used for describe by Surrey.
Describ'er, *n. s.*
Descrip'tion, *n. s.*
Descript'ive, *adj.*
Descrive', *v. a.*

Men passed through the land, and *described* it by cities into seven parts in a book, *Jos.* xviii. 9.

Speedy of foot, of wing likewise as swift:
A monster huge and dreadful to *descrive.* *Surrey.*

I pray thee overname them; and, as thou namest them, I will *describe* them; and according to my description, level at my affection. *Shakspeare.*

I'll pay six thousand, and deface the bond,
Before a friend of this *description*
Shall lose a hair. *Id. Merchant of Venice.*

From a plantation and colony, an Island near Spain was by the Greek *describers* named Erythra.

Browne.

A poet must refuse all tedious and unnecessary *descriptions*; a robe which is too heavy, is less an ornament than a burthen. *Dryden.*

He that writes well in verse will often send his thoughts in search, through all the treasure of words that express any one idea in the same language, that so he may comport with the measures of the rhyme, or with his own most beautiful and vivid sentiments of the thing he *describes.* *Watts.*

In all societies, consisting of various *descriptions* of citizens, some *descriptions* must be uppermost.

Burke.

Some of our best critics scout and reprobate your Yahoos with the most marked energy; complain, that they feel squeamish, when they think of them; and have the idea, that *descriptions* of that *description* can be agreeable to readers of no *description.*

Beattie.

The most capital *descriptive* poem in our own, and perhaps in any language, ancient or modern, is Thomson's Seasons. *Mavor.*

DESCRY', *v. a.* & *n. s.* } Fr. *descrier.* To give notice of any thing suddenly discovered: hence to spy out; detect; discover.
Descri'er, *n. s.*

And the house of Joseph sent to *descry* Bethel.

Judges i. 23.

Thus dight, into the court he took his way;
Both through the guard, which never him *descried*,
And through the watchmen, who him never spied

Hubbard's Tale.

Edmund, I think, is gone to *descry*
The strength o' the enemy. *Shakspeare.*

How near 's the other army?
—Near, and on speedy foot, the main *descry*
Stands in the hourly thought. *Id.*

The glad *descrier* shall not miss
To taste the nectar of a kiss. *Crashaw.*

Lo! now from the tops of the mountains they *descry* the ark floating upon the waters, and behold with envy that which they before beheld with scorn. *Bishop Hall. Contemplations.*

Although the motion of light be not *descried*, no argument can be made from thence to prove that light is not a body. *Digby.*

But him the Baptist soon
Descryed, divinely warned, and witness bore
As to his worthier, and would have resigned
To him his heavenly office. *Milton.*

Once more at least look back, said I;
Thyself in that large glass *descry*. *Prior.*

No more the caviller could say,
No further faults *descry*;
For upwards gazing as he lay,
An acorn loosened from its spray
Fell down upon his eye. *Watts.*

DESEADA, DESIRADA, or DESIDERADA, the first of the Caribbee Islands, discovered by Columbus in his second voyage, in 1494, when he gave it that name. It is ten miles long and five broad, and looks at a distance like a galley, with a low point at the north-west end. The soil is in some places black and good, in others sandy and unproductive. It lies twelve miles east of Guadaloupe.

DESEADA, or CAPE DESIRE, the south point of the Straits of Magellan, at the entrance of the South Sea. Long. 74° 18′ W., lat. 53° 4′ S.

DES'ECRATE, *v. a.* } Lat. *desacro*, from
DESECRA'TION. } *de*, privative, and *sacro*, to consecrate; although the Latin compound *desacro* also signifies to hallow. To apply to common or profane purposes, that which has been consecrated.

The founders of monasteries imprecated evil on those who should *desecrate* their donations. *Salmon's Survey.*

DESERT', *v. a.*, *n. s.* & *adj.*, DESERT'ER, DESER'TION, DESER'TRICE, *n. s. Fem.* } Fr. *deserter*; from Lat. *desero*, *desertum*. To leave, forsake, abandon. A desert is a solitary, forsaken place; hence, as an adjective, wild, unfrequented, uninhabited: a deserter, he who forsakes his post of duty; and Milton has afforded us a feminine substantive of this meaning.

And it is written in the book of salmys, the abstacioun of hem be maad *desert*, and be there noon that dwelle in it, and anothir take his bishopriche. *Wiclif. Dedis.* 1.

He found him in a *desert* land, and in the waste howling wilderness. *Deuteronomy*, xxxii. 10.

For light she hated, as the deadly bale,
Ay wont in *desert* darkness to remaine,
Where plain none might her see, nor she see ony plaine. *Spenser. Faerie Queene.*

I have words
That would be howled out in the *desert* air,
Where hearing should not catch them. *Shakspeare.*

He, looking round on every side, beheld
A pathless *desert*, dusk with horrid shades. *Milton.*

[It is] as vain to go about to compel (the unhappy pair) into one flesh as to weave a garment of sand.—Cleave to a wife, but let her be a wife, not an adversary, not a *desertrice*. *Id. Tetrachordon.*

Hosts of *deserters*, who your honour sold,
And basely broke your faith for bribes of gold. *Dryden.*

Christ hears and sympathises with the spiritual agonies of a soul under *desertion*, or the pressures of some stinging affliction. *South.*

What is it that holds and keeps the orbs in fixed stations and intervals, against an incessant and inherent tendency to *desert* them? *Bentley.*

The members of both houses, who at first withdrew, were counted *deserters*, and outed of their places in parliament. *King Charles.*

Thou, false guardian of a charge too good,
Thou, mean *deserter* of thy brother's blood. *Pope.*

A *deserter*, who came out of the citadel, says the garrison is brought to the utmost necessity. *Tatler.* No. 59.

Deserted is my own good hall,
Its hearth is desolate;
Wild weeds are gathering on the wall;
My dog howls at the gate. *Byron.*

DESERTER. A deserter is, by the articles of war, punishable by death; which, after conviction, is executed upon him at the head of the regiment he formerly belonged to, with his crime written on his breast. A reward of twenty shillings is given to every person who apprehends a deserter, and persons concealing, harboring, or buying the clothes, arms, &c. of such person, are liable to very heavy penalties. No non-commissioned officer or soldier shall enlist himself in any other regiment, troop, or company, without a regular discharge from the regiment, troop, or company, in which he last served, on the penalty of being reputed a deserter, and suffering accordingly: and in case any officer shall knowingly receive and entertain such non-commissioned officer or soldier, or shall not, after his being discovered to be a deserter, immediately confine him, and give notice thereof to the corps in which he last served, he, the said officer so offending, shall, by a court-martial, be cashiered.

DESERT', *n. s.* } Old Fr. *deserte*, or a
DESERT'LESS, *adv.* } participial form of DESERVE, which see. Merit or demerit; title to reward or punishment: desertless is used by Dryden for without merit.

Being of necessity a thing common, it is, through the manifold persuasions, dispositions, and occasions of men, with equal *desert* both of praise and dispraise, shunned by some, by others desired. *Hooker.*

Use every man after his *desert*, and who shall 'scape whipping? *Shakspeare.*

She said she loved,
Loved me *desertless*; who with shame confest
Another flame had seized upon my breast. *Dryden.*

All *desert* imports an equality between the good conferred, and the good deserved, or made due. *South.*

I was determined to be advanced in my profession by force of *desert*, or not at all. *Bishop Watson.*

DESERVE', *v. a.* DESER'VER, *n. s.* DESER'VEDLY, DESER'VING, *n. s.* } Fr. *deservir;* Lat. *desirvire*, to be useful, from *de* and *servus*, to be a slave. To be worthy of *good* or *ill*: all the derivatives from this root are applied to both by respectable writers. But when used absolutely, to be deserving, &c., it commonly expresses merit.

Those they honoured, as having power to work or cease, as men *deserved* of them. *Hooker.*

Their love is never linked to the *deserver*,
Till his deserts are passed. *Shakspeare.*

All friends shall taste
The wages of their virtue, and all foes
The cup of their *deservings*. *Id.*

Heavy, with some high minds, is an overweight of obligation; or otherwise great *deservers* do, perchance, grow intolerable presumers. *Wotton.*

Yet well, if here would end
The misery: I *deserved* it, and would bear
My own deservings. *Milton.*

Ill *deserving* of others can be no excuse for our injustice, for our uncharitableness.
Bp. Hall. Contemplations.

Courts are the places where best manners flourish,
Where the *deserving* ought to rise. *Otway.*

A mother cannot give him death: though he
Deserves it, he *deserves* it not from me. *Dryden.*

Since my Orazia's death I have not seen
A beauty so *deserving* to be queen. *Id.*

According to the rule of natural justice, one man may merit and *deserve* of another. *South.*

A man *deservedly* cuts himself off from the affections of that community which he endeavours to subvert. *Addison.*

Annex to each bishoprick some portion of the royal ecclesiastical patronage, which is now prostituted by the Chancellor and the Minister of the day to the purpose of parliamentary corruption, that every Bishop may have means sufficient to reward all the *deserving* clergy of his diocese. *Bp. Watson.*

DESIC'CATE, *v. a.* & *n.* DESIC'CANTS, *n. s.* DESICCA'TION. } Lat. *desicco, de* and *siccus;* Heb. ציה dry (Minsheu). To dry up; to exhaust; to grow dry; Desiccants are applications that dry up sores.

Where there is moisture enough, or superfluous, their wine helpeth to digest and *desiccate* the moisture. *Bacon's Natural History.*

If the spirits issue out of the body, there followeth *desiccation*, induration, and consumption. *Id.*

Seminal ferments were elevated from the sea, or some *desiccated* places thereof, by the heat of the sun. *Hale.*

This, in the beginning, may be prevented by *desiccants*, and wasted. *Wiseman.*

If tea be a *desiccative*, according to Paulli, it cannot weaken the fibres, as our author imagines; if it be emetick, it must constringe the stomach, rather than relax it. *Johnson.*

DESIDE'RATE, *v. a.* DESIDERA'TUM, *n. s.* } Lat. *desidero.* To want or desire in absence. A desideratum is that which is much, or has been long, desired.

Eclipses are of wonderful assistance toward the solution of this so desirable and so much *desiderated* problem. *Cheyne.*

DESIGN', *v. a.* & *n. s.* DESIGN'ABLE, *adj.* DESIGNA'TION, *n. s.* DESIGN'EDLY, *adv.* DESIGN'ER. *n. s.* DESIGN'ING *part. adj.* DESIGN'LESS, *adj.* DESIGN'LESSLY, *adv.* DESIGN'MENT, *n. s.* } Fr. *desiner;* Span *desinar;* Ital. *desegnare;* Lat. *designare.* To show a thing by signs or tokens; to purpose; to form or order with a particular purpose in view, taking *for* after it; to devote, taking *to;* to plan, project. As a substantive a design is the scheme or plan of an undertaking in the mind, or in any form of development: and designment is synonymous with design: designable is distinguishable: designation, the act or form of pointing or marking out: designedly, purposely, with some proposed object in view: designing is generally used in an ill sense. Designless is without plan or scheme, purposeless; designlessly is inadvertently.

Leave these sad *designs*
To him that hath more cause to be a mourner.
Shakspeare.

News, lords! our wars are done:
The desperate tempest hath so banged the Turks,
That their *designment* halts. *Id.*

William the Conqueror forebore to use that claim in the beginning, but mixed it with a titulary pretence, grounded upon the will and *designation* of Edward the Confessor. *Bacon.*

We are to observe whether the picture or outlines be well drawn, or, as more elegant artizans term it, well *designed*; then, whether it be well coloured; which be the two general heads *Wotton.*

That Providence, which keeps the whole from destruction, will also keep all its necessary parts from corruption, lest the work of God become insufficient to the end of its *designation*. *Bishop Taylor.*

One of those places was *designed* by the old man *to* his son. *Clarendon.*

In this great concert of his whole creation, the *designlessly* conspiring voices are as differing as the conditions of the respective singers. *Boyle.*

'Tis a greater credit to know the ways of captivating nature, and making her subserve our purposes and *designments*, than to have learned all the intrigues of policy. *Glanville.*

Is he a prudent man, as to his temporal estate, that lays *designs* only for a day, without any prospect to the remaining part of his life? *Tillotson.*

The acts of religious worship were purposely *designed for* the acknowledgment of a Being, whom the most excellent creatures are bound to adore as well as we. *Stillingfleet.*

You are not *for* obscurity *designed*,
But, like the sun, must cheer all human kind.
Dryden.

He was born to the inheritance of a splendid fortune; he was *designed to* the study of the law. *Id.*

A sedate settled *design* upon another man's life, puts him in a state of war with him against whom he has declared such an intention. *Locke.*

'Tis not enough to make a man a subject, to convince him that there is regal power in the world; but there must be ways of *designing* and knowing the person to whom this regal power of right belongs. *Id.*

The power of all natural agents is limited: the mover must be confined to observe these proportions, and cannot pass over all these infinite *designable* degrees in an instant. *Digby.*

Uses made things; that is to say, some things were made *designedly*, and on purpose, for such an use as they serve to. *Ray on the Creation.*

There is a plain *designation* of the Duke of Marlborough: one kind of stuff used to fatten land is called marle, and every body knows that borough is a name for a town. *Swift.*

There is a great affinity between designing and poetry; for the Latin poets, and the *designers* of the Roman medals, lived very near one another, and were bred up to the same relish for wit and fancy. *Addison.*

The hand strikes out some new *design*,
Where life awakes and dawns at every line. *Pope.*

'Twould shew me poor, indebted, and compelled,
Designing, mercenary; and I know
You would not wish to think I could be bought.
Southern.

It has therefore always been both the rule and practice for such *designers* to suborn the publick interest, to countenance and cover their private. *Decay of Piety.*

Spectators only on this bustling stage,
We see what vain *designs* mankind engage.
Churchill.

Would I describe a preacher, such as Paul,
Were he on earth, would hear, approve, and own,
Paul should himself direct one, I would trace
His master-strokes, and draw from his *design*.
Cowper.

DESIGN, in manufactories, expresses the figures with which the workman enriches his stuff, or silk, and which he copies after some painter or eminent draughtsman, as in diaper, damask, and other flowered silk and tapestry, &c. In undertaking of such kinds of figured stuffs, it is necessary, says Mons. Savary, that before the first stroke of the shuttle, the whole design be represented on the threads of the warp; we do not mean in colors, but with an infinite number of little packthreads, which being disposed so as to raise the threads of the warp, let the workman see, from time to time, what kind of silk is to be put in the eye of the shuttle for woof. This method of preparing the work is called reading the design, and reading the figure, which is performed in the following manner: a paper is provided, considerably broader than the stuff, and of a length proportionate to what is intended to be represented thereon. This they divide lengthwise, by as many black lines as there are intended threads in the warp; and cross these lines by others drawn breadthwise, which, with the former, make little equal squares; on the paper thus squared, the draughtsman designs his figures, and heightens them with colors as he sees fit. When the design is finished, a workman reads it, while another lays it on the simblot. To read the design is to tell the person who manages the loom the number of squares or threads comprised in the space he is reading, intimating at the same time, whether it is ground or figure. To put what is read on the simblot is to fasten little strings to the several packthreads, which are to raise the threads named; and this they continue to do till the whole design is read. Every piece being composed of several repetitions of the same design, when the whole design is drawn, the drawer, to re-begin the design afresh, has nothing to do but to raise the little strings, with slip-knots, to the top of the simblot, which he had laid down to the bottom: this he is to repeat as often as is necessary till the whole is manufactured. The ribbon weavers have likewise a design, but far more simple than that now described. It is drawn on paper with lines and squares, representing the threads of the warp and woof. But instead of lines, whereof the figures of the former consist, these are constituted of points only, or dots, placed in certain of the little squares formed by the intersection of the lines. These points mark the threads of the warp that are to be raised, and the spaces left blank denote the threads that are to keep their situation: the rest is managed as in the former.

DESIGN, in music, is defined by Rousseau to be the invention and the conduct of the subject, the disposition of every part, and the general order of the whole. See MUSIC.

DESIGN is particularly used, in painting, for the first idea of a large work, drawn roughly, with an intention to be executed and finished in large. In this sense it is the simple contour or outlines of the figures intended to be represented, or the lines that terminate and circumscribe them: such design is sometimes drawn in crayons on ink, without any shadows at all: sometimes it is hatched, that is, the shadows are expressed by sensible outlines, usually drawn across each other with the pen, crayon, or graver. Sometimes the shadows are made with the crayon rubbed so as that there do not appear any lines: at other times, the grains or stroke of the crayon appear, as not being rubbed; sometimes the design is washed, that is, the shadows are done with a pencil in Indian ink, or some other liquor; and sometimes the design is colored, that is, colors are laid on resembling those intended for the grand work.

DESIGNATION of an estate is made by the tenants, butments, and boundings. Among the Romans there were designations of the consuls and other magistrates, some time before their elections.

DESIGNATOR, a Roman officer, who assigned and marked each person his place and rank in public ceremonies, shows, processions, &c. He was a kind of master of the ceremonies, who regulated the seats, march, order, &c. There were designators at funeral solemnities, and at the games, theatres, and shows, who not only assigned every one his place, but also led him to it; as appears from the prologue to the Pœnulus of Placetus.

DESIGNING, the art of delineating or drawing the appearance of natural objects, by lines, on a plane. To design, according to the rules of mathematics, makes the object of perspective. See PERSPECTIVE.

DESIRE', *v. a.* & *n. s.*
DESIR'ABLE, *adj.*
DESIR'ABLY, *adv.*
DESIR'ABLENESS, *n. s.*
DESIR'ER,
DESIR'OUS, *adj.*
DESIR'OUSLY, *adv.*

Fr. *desirer*; Span. *dessear*; Lat. *desiderare*, which Minsheu thinks derived from *de sideribus*, the stars having been the first objects of worship and admiration. To wish; to long for; intreat of, or for; demand. As a noun it generally expresses

a strong or earnest wish. That is desirable which is wished with earnestness ; pleasant; delightful. Desirous is full of desire.

And he seide to hem with *desier* I haue *desirid* to ete this pask with you bifore that I suffre.
Wiclif. Luk. 22.

Be not *desirous* of his dainties ; for they are deceitful food. *Prov.* xxiii. 3.

For possible is, sin thou hast hir presence,
And art a knight, a worthy and an able,
That by some cas, sin Fortune is changeable,
Thou maiest to thy *desir* sometime atteine.
Chaucer. Cant. Tales.

A doleful case *desires* a doleful song,
Without vain art or curious compliments.
Spenser.

The same piety which maketh them that are in authority *desirous* to please and resemble God by justice, inflameth every way men of action with zeal to do good. *Hooker.*

I will counterfeit the bewitchment of some popular man, and give it bountifully to the *desirers*.
Shakspeare.

Sir, I intreat you home with me to dinner,
—I humbly do *desire* your grace of pardon ;
I must away this night. *Id.*

Men are drowsy and *desirous* to sleep before the fit of an ague, and yawn and stretch. *Bacon.*

Adam the while,
Waiting *desirous* her return, had wove
Of choicest flowers a garland. *Milton.*

Jove beheld it with a *desiring* look.
Dryden.

Desire 's the vast extent of human mind ;
It mounts above, and leaves poor hope behind.
Id.

Desire is the uneasiness a man finds in himself upon the absence of any thing, whose present enjoyment carries the idea of delight with it. *Locke.*

She then let drop some expressions about an agate snuff-box : I immediately took the hint, and bought one; being unwilling to omit any thing that might make me *desirable* in her eyes. *Addison.*

This *desire* of knowledge, like other affections planted in our nature, will be very apt to lead us wrong, if it be not well regulated. *Mason.*

Fiction raises the mind by accommodating the images of things to our *desires*, and not, like history and reason, subjecting the mind to things. *Byron.*

DESIRE, PORT, a harbour on the eastern coast of South America, so called by Sir Thomas Cavendish, in 1586. On the south side of its entrance is a remarkably steep rock, which is an excellent sea-mark. The harbour was found, by commodore Byron, to be narrow for nearly four miles, with a tide running at the rate of eight miles an hour. There were also various rocks and shoals; but they were all above water. Long. 64° 25′ W., lat. 47° 7′ S.

DESIST′, *v. n.* } Fr. *desister ;* Span. *de-*
DESIST′ANCE, *n. s.* } *sister ;* Ital. and Lat. *desistere*, from *de* (from), and *sisto, sto ;* Gr. σταω, to stand. To stand off, or cease from any thing ; to stop. Desistance is cessation.

Desist, thou art discerned,
And toil'st in vain ; nor me in vain molest.
Milton.

Men usually give freeliest where they have not given before : and make it both the motive and excuse of their *desistance* from giving any more, that they have given already. *Boyle.*

There are many who will not quit a project, though they find it pernicious or absurd ; but will readily *desist* from it, when they are convinced it is impracticable. *Addison.*

DES′ITIVE, *adj.* Lat. *desitus.* Ending ; concludent ; final.

Inceptive and *desitive* propositions are of this sort ; the fogs vanish as the sun rises ; but the fogs have not yet begun to vanish, therefore the sun is not yet risen. *Watts.*

DESK, *n. s.* Dut. *disch*, a table; Teut. *tisch.* An inclining table for the use of writers or readers, made commonly with a box or repository connected with it.

Tell her in the *desk*,
That's covered o'er with Turkish tapestry,
There is a purse of ducats. *Shakspeare.*

He is drawn leaning on a *desk*, with his bible before him. *Walton's Angler.*

I have been obliged to leave unfinished in my *desk* the heads of two essays. *Pope.*

Sweet sleep enjoys the curate in his *desk*,
The tedious rector drawling o'er his head ;
And sweet the clerk below. *Cowper.*

DESMOULINS (B. C.), one of the demagogues of the French revolution, was born at Guise, in Picardy, in 1762, and is said to have been a descendant of the celebrated Charles Dumoulin. Educated with Robespierre, for the bar, he became a counsellor of parliament, and commenced his career, as an advocate, by pleading against his father, on a charge for his board. From the commencement of the revolution he was connected with Robespierre, and became the editor of a journal, in which he styled himself attorney-general of the Lantern. He was the great director of the factious mob of Paris, but at one time was esteemed by La Fayette. In a denunciation against him to the Constituent Assembly, in 1790, for his virulent abuse of the king, Desmoulins was warmly defended by all the jacobins. After the unhappy flight of Louis XVI. to Varennes, he was one of the instigators of the meeting of the Champ de Mars; and was conspicuous in the insurrection of the 20th of June, 1792, as well as in that of the 10th of August. He now became secretary to Danton, the minister of justice, and was chosen a deputy from Paris to the convention, in which, of course, he voted for the death of the king. Robespierre, however, was jealous of his connexion with Danton ; he was arrested March 31st, 1794, and on the 5th of April suffered by the guillotine. Beside a great number of political pamphlets, Desmoulins published Les Revolutions de France et de Brabant; Le Vieux Cordelier ; Histoires des Brissotins ; Satires ; and Opuscules de Camille Desmoulins.

DES′OLATE, *v. a.* & *adj.* } Fr. *desoler ;* Sp.
DES′OLATELY, *adv.* } *dessolar ;* Italian
DESOLA′TION, *n. s.* } and Lat. *desolare*,
DES′OLATER. } from *de* and *solus*.

To depopulate ; make desert ; solitary ; uninhabited. Desolation is the act or consummation of ruin or destruction ; desolater, he who accom-

plishes it. Wiclif makes a curious use of the verb for being removed from.

And britheren, we *desolat* fro ghou for a tyme bi mouth and in beholdyng but not in herte, han highed more plenteuousli to se ghoure face with greet desier. *Wiclif.* 1 *Tessal.* ii.

How is Babylon become a *desolation* among the nations! *Jer.* l. 23.

The lion would not leave her *desolate*,
But with her went along, as a strong gard
Of her chast person. *Spenser. Faerie Queene.*

What with your praises of the country, what with your discourse of the lamentable *desolation* thereof made by those Scots, you have filled me with a great compassion. *Spenser's State of Ireland.*

Let us seek some *desolate* shade, and there
Weep our sad bosoms empty. *Shakspeare.*

Without her follows to myself and thee,
Herself, the land, and many a Christian soul,
Death, *desolation*, ruin, and decay. *Id.*

The island of Atlantis was not swallowed by an earthquake, but was *desolated* by a particular deluge. *Bacon.*

Thick around
Thunders the sport of those, who with the gun,
And dog impatient bounding at the shot,
Worse than the season *desolate* the fields. *Thomson.*

It is remarkable, that they never see any way to their projected good but by the road of some evil. Their imagination is not fatigued with the contemplation of human suffering, through the wild waste of centuries, added to centuries of miseries and *desolation*. *Burke.*

He calls for famine, and the meagre fiend
Blows mildew from between his shrivelled lips,
And taints the golden ear. He springs his mines,
And *desolates* a nation at a blast. *Cowper.*

The *desolater desolate!*
The victor overthrown!
The arbiter of others' fate
A suppliant for his own! *Byron.*

DESPARD (Edward Marcus), was a native of Queen's county, in Ireland, where his family maintained considerable respectability. When but nineteen, he entered into the army as an ensign, and soon became distinguished for his skill as an engineer. About the close of the American war, he served in the West Indies, where his talents appeared particularly conspicuous in an expedition on the Spanish Main. He was promoted to the rank of lieutenant-colonel for his achievements on this occasion, and, in 1784, was appointed English superintendant in the Bay of Honduras; but his conduct proving offensive to the settlers, they complained to the government at home; in consequence of which he was suspended. He arrived in England in 1790, and made application to government for an investigation of his conduct, but his claims were rejected; upon which he became a violent democrat, and, in consequence of his inflammatory conduct, was apprehended, during the suspension of the Habeas Corpus Act, and sent to Cold Bath-fields prison; and finally to Tothill-fields bridewell. He was afterwards liberated on his own recognisance. Soured, apparently, by his disastrous fate, he now endeavoured to seduce and corrupt some of the lowest of the soldiery; and, having collected some few of similar sentiments, held secret meetings with them at different places, to which no persons were admitted without a treasonable oath. Various plans were agitated in this club for the murder of the king and other desperate undertakings; but, some of the conspirators having discovered the plot, the colonel, and several others, were apprehended, and brought to trial by a special commission, February 5th, 1803. Despard and nine others were found guilty, on the clearest proof, and executed on Monday, the 21st.

DESPAIR', *v. n.* & *n. s.* } Fr. *desesperer*;
DESPAIR'ER, *n. s.* } Span. and Port.
DESPAIR'FUL, *adj.* } *desesperar*; Lat.
DESPAIR'INGLY, *adv.* } *desperare*; from *de* (privative) and *spero* to hope; Heb. שבר. To be hopeless; to despond, taking *of*, in modern usage, before the object. Despair is hopelessness; confirmed despondency; and sometimes expresses the cause of such a state of mind.

We are troubled on every side, yet not distressed; we are perplexed, but not in *despair*. 2 *Cor.* iv. 8.

Other cries among the Irish savor of the Scythian barbarism; as the lamentations of their burials, with *despairful* outcries. *Spenser.*

Strangely visited people,
All swoln and ulcerous, pitiful to the eye;
The mere *despair* of surgery, he cures;
Hanging a golden stamp about their necks,
Put on with holy prayers. *Shakspeare.*

We commend the wit of the Chinese, who *despair of* making of gold, but are mad upon making of silver. *Bacon.*

He speaks severely and *despairingly* of our society. *Boyle.*

That sweet but sour *despairful* care. *Sidney.*

Equal their flame, unequal was their care;
One loved with hope, one languished with *despair*. *Dryden.*

He cheers the fearful, and commends the bold,
And makes *despairers* hope for good success. *Id.*

Despair is the thought of the unattainableness of any good, which works differently in men's minds; sometimes producing uneasiness or pain, sometimes rest and indolence. *Locke.*

Are not all or most evangelical virtues and graces in danger of extremes? As there is, God knows, too often a defect on the one side, so there may be an excess on the other: may not hope in God, or godly sorrow, be perverted into presumption or *despair*? *Sprat.*

Enlivening Hope, and fond Desire,
Resign the heart to Spleen and Care;
Scarce frighted Love maintains her fire,
And rapture saddens to *despair*.
Johnson. Winter's Walk.

DESPATCH', *v. a.* & *n. s.* } Fr. *despecher*;
DESPATCH'FUL, *adj.* } Span. *despachar*.
To send off or away in haste; hence to perform business quickly, and to assassinate. The substantive is used not only for prompt performance of business, but intelligence, or news, supposed to be sent with despatch; and in the plural for official or public intelligence or papers. Despatchful is, sent in haste. The *e* of the first syllable has become of late almost universal.

And the company shall stone them with stones, and *despatch* them with their swords. *Ezek.* xxiii. 47.

What are the brothers parted?
—They have *despatched* with Pompey; he is gone.
Shakspeare.

Edmund, I think, is gone,
In pity of his misery to *despatch*
His knighted life. *Shakspeare.*

Long and curious speeches are as fit for *despatch* as a robe or mantle, with a long train, is for a race. *Bacon.*

So saying, with *despatchful* looks in haste
She turns, on hospitable thoughts intent. *Milton.*

Bushes are of so quick *despatch*, that the joy of the wicked is compared to a fire of thorns. *Bp. Hall. Contemplations.*

Doctor Theodore Coleby, a sober man, I *despatched* immediately to Utrecht, to bring the moxa, and learn the exact method of using it. *Temple.*

Despatch me quickly, I may death forgive;
I shall grow tender else, and wish to live. *Dryden.*

No sooner is one action *despatched*, which, by such a determination as the will, we are set upon, but another uneasiness is ready to set us on work. *Locke.*

Let one *despatchful* bid some swain to lead,
A well-fed bullock from the grassy mead. *Pope.*

You'll see, could you her inward motions watch,
Feigning delay, she wishes for *despatch*;
Then to a woman's meaning would you look,
Then read her backward. *Granville.*

DES'PERATE, *adj.* & *n. s.* } Lat. *desperatus.* See DESPAIR. Hopeless; abandoned to sorrow; without care of consequences; irretrievable: hence rash; mad; and expressing an extreme degree of any thing bad.
DES'PERATELY, *adv.*
DES'PERATENESS, *n. s.*
DESPERA'TION.

Were it not the part of a *desperate* physician to wish his friend dead, rather than to apply the best endeavours of his skill for his recovery? *Spenser's State of Ireland.*

Since his exile she hath despised me most;
Forsworn my company, and railed at me,
That I am *desperate* of obtaining her. *Shakspeare.*

These debts may be well called *desperate* ones; for a mad man owes them. *Id.*

The going on not only in terrors and amazement of conscience, but also boldly, hopingly, confidently, in wilful habits of sin, is called a *desperateness* also; and the more bold thus, the more *desperate*. *Hammond.*

As long as we are guilty of any past sin, and have no promise of remission, whatever our future care be, this *desperation* of success chills all our industry, and we sin on because we have sinned. *Id.*

Grace often resisted turns to *desperateness.* *Bishop Hall. Contemplations.*

'Tis not amiss, ere ye're giv'n o'er,
To try one *desperate* med'cine more;
For where your case can be no worse,
The *desperatest* is the wisest course! *Hudibras.*

In a part of Asia, the sick, when their case comes to be thought *desperate*, are carried out and laid on the earth, before they are dead, and left there. *Locke.*

She fell *desperately* in love with him, and took a voyage into Sicily in pursuit of him. *Addison.*

Concluding all mere *desperate* sots and fools,
That durst depart from Aristotle's rules. *Pope.*

Beware of *desperate* steps, the darkest day,
Live till to-morrow will have passed away. *Cowper.*

I cannot find my hero; he is mixed
With the heroic crowd that now pursue
The fugitives, or battle with the *desperate.*
What have we here? *Byron.*

DE'SPICABLE, *adj.* } See DESPISE. Contemptible; mean low.
DE'SPICABLENESS, *n. s.*
DE'SPICABLY, *adv.*

Our case were miserable, if that wherewith we most endeavour to please God were in his sight so vile and *despicable* as men's disdainful speech would make it. *Hooker.*

All the earth he gave thee to possess and rule,
No *despicable* gift. *Milton.*

Not less even in this *despicable* hero,
Than when my name shook Africk with affright,
And froze your hearts beneath your torrid zone. *Dryden.*

Here wanton Naples crowns the happy shore,
Nor vainly rich, nor *despicably* poor;
The town in soft solemnities delights,
And gentle poets to her arms invites. *Addison.*

We consider the great disproportion between the infinity of the reward and the *despicableness* of our service. *Decay of Piety.*

There is, indeed, no employment, however *despicable*, from which a man may not promise himself more than competence, when he sees thousands and myriads raised to dignity, by no other merit than that of contributing to supply their neighbours with the means of sucking smoke through a tube of clay, &c. *Adventurer.*

DESPI'SE, *v. a.* } Span. *despreciar*, from Lat. *despicere*, from *de*, down and *specio*; Gr. σκεπτω; Heb. שקף, to look or see. To look upon with contempt, to scorn; abhor: despisable is contemptible.
DESPIS'ABLE, *adj.*
DESPIS'ER, *n. s.*

God chees the feble thingis and *despisable* thingis of the world to confounde the stronge thingis. *Wiclif.* 1 *Cor.* 1

Behold ye *despisers*, and wonder, and perish. *Isaiah.*

However yet they me *despise* and spight,
I feed on sweet contentment of my thought. *Spenser. The Tears of the Muses.*

Let not your ears *despise* my tongue for ever,
Which shall possess them with the heaviest sound
That ever yet they heard. *Shakspeare.*

As the wicked have no peace with God, so the godly have no peace with men; for if they prosper not they are *despised*; if they prosper they are envied. *Bp. Hall. Contemplations.*

All cold, but in her breast, I will *despise*;
And dare all heat but that in Celia's eyes, *Roscommon.*

I am obliged to you for taking notice of a poor old distressed courtier, commonly the most *despisable* thing in the world. *Arbuthnot to Pope.*

Admire, exult—*despise*—laugh, weep,—for here
There is such matter of all feeling:—Man!
Thou pendulum betwixt a smile and tear,
Ages and realms are crowded in this span. *Byron.*

DESPITE', *v. a.* & *n. s.* } Fr. *dépit*; Dutch *spijt*; Ital. *despitto*, from Lat. *despectus*, *de* and *specio*, *spectus.* See DESPISE. To vex, to do a malicious act to: malice; malignity; and hence defiance. Despiteful is malicious, mischievous, splenetic. Despitefulness, synonymous with despite; and despiteous, despiteously, with despite-
DESPITE'FUL, *adj.*
DESPITE'FULLY, *adv.*
DESPITE'FULNESS, *n. s.*
DESPIT'EOUS, *adj.*
DESPIT'EOUSLY, *adv.*

tul, despitefully. Wiclif uses despite for dishonor.

Wher a pottere of cley hath not power to make of the same gobet oo vessel into onour, a nothir into *dispyt?* *Wiclif. Romayns* 9.

Pray for them that *despitefully* use you and persecute you. *Matthew* v. 44.

But out the child he hent
Despiteously, and gan a chere to make,
As though he would have slain it or he went.
Chaucer. Cant. Tales.

Full many mischiefs follow cruell wrath;
—— Bitter *despight*, with rancour's rusty knife;
And fretting griefe the enemy of life.
Spenser. Faerie Queene.

The knight of the red-cross, when him he spied,
Spurring so hot with rage *despiteous*,
Can fairly couch his speare. *Id.*

The mortal steel *despiteously* entailed
Deep in their flesh, quite through the iron walls,
That a large purple stream adown their giambeux falls.
Spenser.

The life thou gavest me first, was lost and done;
Till with thy warlike sword *despite* of fate,
To my determined time thou gavest new date.
Shakspeare.

Turning *despiteous* daughter out of door. *Id.*

Saturn, with his wife Rhea, fled by night; setting the town on fire, to *despite* Bacchus. *Raleigh.*

Preserve us from the hands of our *despiteful* and deadly enemies. *King Charles.*

His punishment, eternal misery,
It would be all his solace and revenge,
As a *despite* done against the Most High,
Thee once to gain companion of his woe. *Milton.*

Know I will serve the fair in thy *despite*.
Dryden.

With men these considerations are usually the causes of *despite*, disdain, or aversion from others; but with God they pass for reasons of our greater tenderness towards others. *Sprat.*

Say, would the tender creature, in *despite*
Of heat by day, and chilling dews by night,
Its life maintain? *Blackmore.*

Venice! thy lot
Is shameful to the nations,—most of all,
Albion! to thee: the Ocean queen should not
Abandon Ocean's children; in the fall
Of Venice think of thine, *despite* thy watery wall.
Byron.

DESPOIL', *v. a.* } De and spoil. Fr. *de-*
DESPOLIA'TION, *n. s.* } *pouiller*, Ital. *despogliare*; Lat. *despoliare*. See SPOIL. To rob; strip; divest; deprive; taking *of*. Despoliation is the act of stripping, or plundering.

A groom gan *despoil*
Of puissant arms, and laid in easy bed. *Spenser.*

You are nobly born,
Despoiled of your honour in your life. *Shakspeare.*

He waits, with hellish rancour imminent,
To intercept thy way, or send thee back
Despoiled of innocence, *of* faith, *of* bliss. *Milton.*

He, pale as death, *despoiled of* his array,
Into the queen's apartment takes his way. *Dryden.*

Even now thy aid,
Eugene, with regiments unequal prest,
Awaits: this day *of* all his honours gained
Despoils him, if thy succour opportune
Defends not the sad hour. *Philips.*

These formed stones, *despoiled of* their shells, and exposed upon the surface of the ground, in time moulder away. *Woodward.*

DESPOND', *v. a.* } Old Fr. *despondre*;
DESPO'NDING, *adj.* } Lat. *despondeo*. To
DESPOND'ENCY, *n. s.* } despair; to lose hope; to become hopeless or desperate.

It is every man's duty to labour in his calling, and not to *despond* for any miscarriages or disappointments that were not in his own power to prevent.
L'Estrange.

Physick is their bane:
The learned leeches in despair depart,
And shake their heads, *desponding* of their art.
Dryden.

Others depress their own minds, *despond* at the first difficulty; and conclude, that making any progress in knowledge, farther than serves their ordinary business, is above their capacities. *Locke.*

It is well known, both from ancient and modern experience, that the very boldest atheists, out of their debauches and company, when they chance to be surprised with solitude or sickness, are the most suspicious, timorous, and *despondent* wretches in the world. *Bentley.*

Aim at perfection in every thing, though in most things it is unattainable; however, they who aim at it, and persevere, will come much nearer to it, than those whose laziness and *despondency* make them give it up as unattainable. *Chesterfield.*

DESPO'NSATE, *v. a.* } Lat. *desponso*. To
DESPONSA'TION, *n. s.* } betroth; to affiance; to unite by reciprocal promises of marriage; the act of betrothing.

DES'POT, *n. s.* }
DESPOT'IC, *adj.* }
DESPOT'ICAL, *adj.* } Fr. *despot*, from
DESPOT'ICALNESS, *n. s.* } Gr. δεσποτης (δεος fear and ποιεω to
DES'POTISM, } make.) An absolute prince; a tyrant: despotic is, absolute in power; arbitrary: despotism, despoticalness, the power of a despot.

God's universal law
Gave to the man *despotick* power
Over his female in due awe,
Nor from that right to part an hour,
Smile she or lowre. *Milton.*

In all its directions of the interior faculties, reason conveyed its suggestions with clearness, and enjoined them with power: it had the passions in perfect subjection; though its command over them was but persuasive and political, yet it had the force of coactive, and *despotical*. *South.*

We see in a neighbouring government the ill consequences of having a *despotic* prince. *Addison.*

Can *despots* compass aught that hails their sway?
Or call with truth one span of earth their own,
Save that wherein at last they crumble, bone by bone?
Byron. Childe Harold's Pilgrimage.

DESPOT originally signified the same with herus, a master. Nicephorus having ordered his son, Stauracius, to be crowned, the son, out of respect, would only take the name ΔΕCΠΟΤΗC, leaving to his father that of BACIΛEYC. The following emperors, however, preferred ΔΕCΠΟΤΗC to BACIΛEYC; particularly Constantine XII., Michael Ducas, Romanus Diogenes, Nicephorus Botoniates, the Comneni, and some others. In imitation of the princes, the princesses likewise assumed the title of ΔΕCΠΟΙΝΑ. It was the emperor Alexius Angelus that created the dignity of despot, and made it the first after that of emperor, or Au-

gustus, above those of Sebastocrator and Cæsar. The despots were usually the emperor's sons or sons-in-law, and their colleagues, or co-partners, in the empire, as well as their presumptive heirs. Those who were sons of the emperors had more privileges and authority than those who were only sons-in-law. Codin, p. 38, describes the habit and ornaments of the despot. See the notes of Father Goar on that author. Under the successors of Constantine the Great, the title Despot of Sparta was given to the emperor's son or brother, who had the city of Sparta or Lacedemon by way of appendage.

DESQUAMATION, *n. s.* Lat. from *squama*. The act of scaling foul bones. A surgical term.

DESSAU, or Dessaw, a strong town of Germany, in Upper Saxony, the capital of the principality of Anhalt. It was first fortified by prince Leopold in 1341, and has one Lutheran and two Calvinist churches, besides a Catholic and Jewish chapel. Inhabitants about 10,000, of which the Jews form one-tenth. Dessau, the surrounding district, contains 53,500 inhabitants: its chief products are corn and flax: it has also considerable pastures. The people manufacture cloths, hats, and stockings. It is seated on the Mulda, a branch of the Elbe, twenty-eight miles south-east of Magdeburg, thirty-seven north of Leipsic, forty-eight south-west of Potsdam, and sixty north-west of Dresden. One of the most remarkable objects here is a dyke at the side of the Elbe, nearly five miles long, from ten to eleven feet high, and sixty feet thick at the base. Long. 12° 17′ 1″ E., lat. 51° 50′ 6″ N.

DESSALINES (John James), brother of the brave Toussaint l'Ouverture, of St. Domingo, was born in slavery, and first emerged with him to notice in the active part they both took in the commotions excited in St. Domingo in 1791. Dessalines particularly distinguished himself by his defence of Crete le Perrot against the French general, Leclerc. When Toussaint was obliged to make peace with the French, Dessalines was included in the treaty, though he by no means approved it; and what followed, but too well confirmed his suspicions of the French. Toussaint was treacherously seized, and carried to France, where he died. Dessalines was now unanimously elected commander-in-chief of the forces, which rose upon Rochambeau, who had succeeded Leclerc, and who treated the black inhabitants of St. Domingo with no less cruelty than his predecessor. He, at once, attacked Rochambeau with the main body of his army, near Cape François, the capital of the island, and defeated him with great slaughter, compelling him to retreat into the town, and finally to surrender to the English. Dessalines now exerted himself to provide for the future security, and concerted a variety of measures for the internal regulation, of the island. He first caused a proclamation of independence to be issued on the 29th of November, 1803, in which the colony was solemnly declared to be for ever separated from France. His next step was to abolish the name of St. Domingo, and substitute in its place the original appellation of Hayti. He was subsequently chosen governor of Hayti during his life, with authority to appoint his successor; and on the 8th of October, 1804, proclaimed emperor. This dignity, the acceptance of which forms the only conspicuous act of folly in his course, he only enjoyed about two years. In October, 1806, Christophe, the second emperor, headed a successful conspiracy against him, and murdered him, by surprise, in his palace.

DESSAULT (Peter Joseph), an eminent French surgeon, born at Magny Vernois, near Macon, in 1744. He received the early part of his education among the Jesuits, with a view to the priesthood, which profession he afterwards declined, and became a student in the military hospital of Besort. When about twenty years of age, he removed to Paris, where the greater part of his time was spent at the anatomical theatres and hospitals; and, in the winter of 1766 he commenced teacher of anatomy. His fame soon spreading, he was in a short time attended by 300 pupils; and, in 1776, was admitted a member of the corporation of surgeons. In 1782 he was appointed surgeon-major to the hospital of Charity. At this time Dessault was considered as one of the first surgeons in Paris; and having succeeded to the next vacancy at the Hotel Dieu, he was entrusted with almost the whole surgical department of that hospital, after the death of Moreau. A clinical school of surgery, on a liberal and extensive plan, was here instituted by him, which attracted a concourse of students, not only from all corners of France, but from foreign countries, and his lectures were frequently attended by 600 students; so that it may be said, the greater part of the surgeons in the French army derived the knowledge of their profession from his school. In 1791 he commenced his Journal de Chirurgerie, a work of considerable reputation. In the midst, however, of his useful and important labors, the prevailing parties of this turbulent period took offence at him as standing neutral; and in 1792, after being twice examined, he was seized, while delivering a lecture, and confined in the Luxembourg prison, where he remained three days; but his usefulness restored him to his former situation. Upon the establishment of the school of health, he was made clinical professor for external maladies; and he was particularly instrumental in the conversion of the Eveché into an hospital for surgical operations. So deeply, however, was he affected by the horrid scenes which were exhibited in May, 1795, that he was seized with a fever, accompanied with delirium, and died on the 1st of June, aged fifty-one.

DESSE'RT, *n. s.* Fr. *desserte*. The last course at an entertainment; the fruit or sweetmeats set on the table after the meat.

To give thee all thy due, thou hast the art
To make a supper with a fine *dessert*. *Dryden.*

At your *dessert* bright pewter comes too late,
When your first course was well served up in plate. *King.*

And here, assembled cross-legged round their trays,
Small social parties just begun to dine;
Above them their *dessert* grew on its vine,
The orange and pomegranate nodding o'er,
Dropped in their laps, scarce plucked, their mellow store. *Byron*

DESTINE, *v. a.* / DES'TINATE, *v. a.* / DESTINA'TION, *n. s.* / DES'TINY, } Lat. *destino*. To doom; design for a given purpose; appoint irreversibly.

Out of this prison helpe that we may 'scape,
And if so be our *destine* be shape
By eterne word to dien in prisoun
Of our lignage have som compassion.
Chaucer. Cant. Tales.

But who can turn the stream of *destiny*,
Or break the chain of strong necessity,
Which fast is tied to Jove's eternal seat?
Faerie Queene.

Thou art neither like thy sire or dam;
But, like a foul mis-shapen stigmatick,
Marked by the *destinies* to be avoided. *Shakspeare.*

The *destinies* of old put poverty upon the celestial herald as a punishment; and ever since those Gemini, or twin-born brats, Poetry and Poverty, have been inseparable companions. *Burton.*

Wherefore cease we then?
Say they who counsel war: we are decreed,
Reserved and *destined* to eternal woe;
Whatever doing, what can we suffer more? *Milton.*

They'll find i' th' physiognomies
O' th' planets, all men's *destinies*;
Like him that took the doctor's bill,
And swallowed it instead o' th' pill. *Hudibras.*

There is a great variety of apprehensions and fancies of men, in the *destination* and application of things to several ends and uses. *Hale.*

All altars flame; before each altar lies,
Drenched in his gore, the *destined* sacrifice. *Dryden.*

Birds are *destinated* to fly among the branches of trees and bushes. *Ray on the Creation.*

The infernal judge's dreadful power
From the dark urn shall throw thy *destined* hour.
Prior.

May heaven around this *destined* head,
The choicest of its curses shed. *Id.*

Some against hostile drones the hive defend,
Others with sweets the waxen cells distend;
Each in the toil his *destined* office bears,
And in the little bulk a mighty soul appears. *Gay.*

DES'TITUTE, *adj.* / DESTITU'TION, *n. s.* } Fr. *destitué*; Span. *destituydo*; Ital. *destituto*, from Lat. *destituo*, (*de* and *statuo*), to forsake. Forsaken; abandoned; taking *of*; friendless, low.

He will regard the prayer of the *destitute*, and not despise their prayer. *Psalm* cii. 17.

That *destitution* in food and cloathing is such an impediment, as, till it be removed, suffereth not the mind of man to admit any other care. *Hooker.*

The order of paying the debts of contract or restitution is set down by the civil laws of a kingdom; in *destitution* or want of such rules, we are to observe the necessity of the creditor, the time of the delay, and the special obligations of friendship. *Taylor.*

Take the destined way
To find the regions *destitute* of day. *Dryden.*

Nothing can be a greater instance of the love that mankind has for liberty, than such a savage mountain covered with people, and the Campania of Rome, which lies in the same country, *destitute* of inhabitants. *Addison.*

DESTROY', *v. a.* / DESTROY'ER, *n. s.* } Fr. *detruire*; Span. *destruire*; Ital. *distruggere*; Lat. *destruere*, *de* privative, and *struo*, Gr. στρωω, to build. To overturn an edifice; hence to ruin; lay waste; put an end to; kill.

Neither grutche ghe as somme of hem grutchiden, and thei perisscheden of a *distriere*. *Wiclif.* 1 *Cor.* x.

The Lord will *destroy* this city. *Gen.* xix. 14.

'Tis safer to be that which we *destroy*,
Than by destruction dwell in doubtful joy.
Shakspeare.

Triumph, to be styled great conquerors,
Patrons of mankind, gods, and sons of gods!
Destroyers rightlier called, and slayers of men.
Milton.

The wise Providence has placed a certain antipathy between some animals and many insects, whereby they delight in their destruction, though they use them not as food; as the peacock *destroys* snakes and adders; the weazel, mice and rats; spiders, flies; and some sorts of flies *destroy* spiders. *Hale.*

Do we not see that slothful, intemperate, and incontinent persons *destroy* their bodies with diseases, their reputations with disgrace, and their faculties with want? *Bentley.*

Yet, guiltless too, this bright *destroyer* lives;
At random wounds, nor knows the wound she gives.
Pope.

Armies, though always the supporters and tools of absolute power, for the time being, are always the *destroyers* of it, too; by frequently changing the hands in which they think proper to lodge it. *Chesterfield.*

When Nero perished by the justest doom
Which ever the *destroyer* yet *destroyed*,
Amidst the roar of liberated Rome,
Of nations freed, and the world overjoyed,
Some hands unseen strewed flowers upon his tomb.
Byron.

DESTRUC'TION, *n. s.* / DESTRUC'TIBLE, *adj.* / DESTRUCTIBI'LITY, / DESTRUCT'IVE, *adj.* / DESTRUCT'IVEEY, *adv.* / DESTRUCT'IVENESS, *n. s.* / DESTRUC'TOR. } Lat. *destructio*, from *destruo*. See DESTROY. The act or consummation of destroying; hence, killing, murder. Destructible is, liable to be destroyed; destructive is, having the quality of destroying; wasteful; tending to ruin, or causing it. The adverb and noun following, express a similar sense. Destructor is used by Boyle for destroyer.

For the aarmuris of our knytghood ben not fleischli, but myghti bie God to the *destructioun* of strengthis. *Wiclif.* 2 *Cor.* 10.

Broad is the way that leadeth to *destruction*. *Matthew.*

'Tis safer to be that which we destroy,
Than by *destruction* dwell in doubtful joy.
Shakspeare.

What a favour is it to men, to be reserved from common *destruction*, to be sacrificed to their Maker and Redeemer. *Bp. Hall. Contemplations.*

Helmont wittily calls the fire the *destructor* and the artificial death of things. *Boyle.*

In ports and roads remote,
Destructive fires among whole fleets we send.
Dryden.

Excess of cold, as well as heat, pains us; because it is equally *destructive* to that temper which is necessary to the preservation of life. *Locke.*

He will put an end to so absurd a practice, which makes our most refined diversions *destructive of* all politeness. *Addison.*

What remains but to breathe out Moses's wish? O that men were not so *destructively* foolish! *Decay of Piety.*

The vice of professors exceeds the *destructiveness* of the most hostile assaults, as intestine treachery is more ruinous than foreign violence. *Id.*

Waste cannot be accurately told, though we are sensible how *destructive* it is. *Johnson.*

If he was
Aught but a phantasy, and could be classed
With forms which live and suffer—let that pass—
His shadow fades away into *destruction's* mass.
Byron.

DESUDA'TION, *n. s.* Lat. *desudatio.* A profuse and inordinate sweating, from what cause soever.

DES'UETUDE, *n. s.* Fr. *desuetude;* Latin, *desuetudo*, from *desuesco*, *desuetus*; *de* privative and *suesco*, to be accustomed. Cessation of custom or habit.

How come they to be prejudiced, rescinded, abrogated, by contrary laws, and *desuetude*, by change of times and opinions. *Bp. Taylor.*

By the irruption of numerous armies of barbarous people, those countries were quickly fallen off, with barbarism and *desuetude*, from their former civility and knowledge. *Hale.*

DESULTOR, in antiquity, a vaulter or leaper, who, leading one horse by the bridle, and riding another, jumped from the back of the one to the other. This practice required great dexterity, being performed before the use of either saddles or stirrups. The custom was practised in the army chiefly among the Numidians, who always carried with them two horses for that purpose, changing them as they tired: the Sarmatæ also were great masters of this exercise.

DES'ULTORY, *adj.* } Latin *desultorius.*
DESULTOR'IOUS. } Vaulting or leaping to and fro. See above. Unsettled; without method in thought or action; wavering.

'Tis not for a *desultory* thought to atone for a lewd course of live: nor for any thing but the superinducing of a virtuous habit upon a vicious one, to qualify an effectual conversion. *L'Estrange.*

Let but the least trifle cross his way, and his *desultorious* fancy presently takes the scent, leaves the unfinished and half-mangled notion, and skips away in pursuit of the new game, *Norris.*

Take my *desultory* thoughts in their native order, as they rise in my mind, without being reduced to rules, and marshalled according to art.
Felton on the Classics.

DESU'ME, *v. a.* Lat. *desumo.* To take from any thing; to borrow.

This pebble doth suppose, as pre-existent to it, the more simple matter out of which it is *desumed*, the heat and influence of the sun, and the due preparation of the matter. *Hale.*

They have left us relations suitable to those of Ælian and Pliny, whence they *desumed* their narrations. *Browne.*

DETACH', *v. a.* } Fr. *detacher*, from *dis* Lat.
DETACH'MENT. } and ATTACH, which see. To separate; disengage: hence to select and send out a body of military: a detachment is applied to the body so sent out.

Mean while the Squire was on his way,
The knight's late orders to obey;
Who sent him for a strong *detachment*
Of beadles, constables, and watchmen.
Hudibras.

If ten men are in war with forty, and the latter *detach* only an equal number to the engagement, what benefit do they receive from their superiority?
Addison.

The several parts of it are *detached* one from the other, and yet join again, one cannot tell how.
Pope.

Besides materials, which are brute and blind,
Did not this work require a knowing mind,
Who for the task should fit *detachments* chuse
From all the atoms? *Blackmore.*

DETACHMENTS are sometimes formed of entire squadrons and battalions; but more generally of a number of men picked out from several regiments or companies equally, to be employed as the general may see proper; whether on an attack, or to scour the country. A detachment of 2000 or 3000 men is a command for a brigadier general: 800 for a colonel: 400 or 500 for a lieutenant-colonel. A captain never marches on a detachment with less than fifty men, a lieutenant, an ensign, and two serjeants. A lieutenant is allowed thirty, and a serjeant; and a seajeant ten or twelve men.

DETAIL, *v. a.* & *n. s.* Fr. *detailler*. From *de* and TELL, which see. To relate in particulars, or with minuteness.

They will perceive the mistakes of these philosophers, and be able to answer their arguments, without my being obliged to *detail* them. *Cheyne.*

I was unable to treat this part of my subject more in *detail*, without becoming dry and tedious. *Pope.*

His train of reasoning is ingenious and whimsical; but I am not at leisure to give you a *detail.*
Franklin.

DETAIN', *v. a.* } Fr. *detiner;* Span. *deteDETAIN'ER, n. s.* } *ner*, from Lat. *detinere*, *de*
DETAIN'DER. } and *teneo;* Gr. τεινω, to stretch. To hold or keep back; to restrain; to keep in custody. See DETINUE.

Let us *detain* thee until we shall have made ready a kid. *Judges*, xiii. 13.

These doings sting him
So venomously, that burning shame *detains* him
From his Cordelia. *Shakspeare.*

Detain not the wages of the hireling; for every degree of detention of it, beyond the time, is injustice and uncharitableness. *Taylor.*

Judge of the obligation that lies upon all sorts of injurious persons; the sacrilegious, the *detainers* of tithes, and cheaters of men's inheritances. *Id.*

Had Orpheus sung it in the nether sphere,
So much the hymn had pleased the tyrant's ear,
The wife had been *detained* to keep her husband there.
Dryden.

DETECT, *v. a.* } Lat. *detectus*, from *deteDETECT'ER, n. s.* } *gere*, *de* privative, and *tego*
DETECT'ION. } to hide. To discover a crime, or scheme; to discover generally.

There's no true lover in the forest; else sighing every minute, and groaning every hour, would *detect* the lazy foot of time as well as a clock. *Shakspeare.*

Should I come to her with any *detection* in my hand, I could drive her then from the ward of her family.
Id.

Though should I hold my peace, yet thou
Wouldst easily *detect* what I conceal. *Milton.*

Detection of the incoherence of loose discourses was wholly owing to the syllogistical form. *Locke.*

The utmost infinite ramifications and inosculations of all the several sorts of vessels may easily be *detected* by glasses. *Ray.*

Not only the sea, but rivers and rains also, are instrumental to the *detection* of amber, and other fossils, by washing away the earth and dirt that concealed them. *Woodward.*

DETEN'TION, *n. s.* From DETAIN, which see. The act of keeping back, or withholding; restraint; custody.

How goes the world, that I am thus encountered
With clamorous claims of debt, of broken bonds,
And the *detention* of long-since due debts,
Against my honour? *Shakspeare.*

This worketh by *detention* of the spirits, and constipation of the tangible parts. *Bacon.*

DETENTS, in a clock are those stops which, by being lifted up or let fall down, lock and unlock the clock in striking.

DETENT-WHEEL, or HOOP-WHEEL, in a clock, a wheel which has a hoop almost round it, wherein there is a vacancy, at which the clock locks.

DETER', *v. a.* } Lat. *deterreo*, from *de*
DETER'MENT, *n. s.* } and *terreo*, to frighten; Gr. τρεω, to tremble. To discourage by terror; to affright from.

I never yet the tragick strain assayed,
Deterred by the inimitable maid. *Waller.*

These are not all thy *determents* that opposed my obeying you. *Boyle.*

Many and potent enemies tempt and *deter* us from our duty; yet our case is not hard, so long as we have a greater strength on our side. *Tillotson.*

Beauty or unbecomingness are of more force to draw or *deter* imitation, than any discourses which can be made to them. *Locke.*

The ladies may not be *deterred* from corresponding with me by this method. *Addison.*

Death is not sufficient to *deter* men who make it their glory to despise it; but if every man who fought a duel were to stand in the pillory, it would quickly lessen the number of these imaginary men of honor. *Id.*

Get a habit of doing right, whatever pain it costs you; let no difficulties *deter* you in the way of virtue; and account every thing else despicable, in comparison of this. *Johnson.*

I do not give you to posterity as a pattern to imitate, but as an example to *deter*. *Junius.*

DETERGE', *v. n.* } Fr. *deterger*; Lat. *de-*
DETERG'ENT, *adj.* } *tergere*, *de* and *tergo*. To cleanse, applied particularly to the cleansing of sores. Detergent, having the quality of cleansing.

The food ought to be nourishing and *detergent.* *Arbuthnot.*

Sea salt preserves bodies through which it passeth, from corruption; and it *detergeth* the vessels, and keeps the fluids from putrefaction. *Id.*

Consider the part and habit of body, and add or diminish your simples as you design to *deterge* or incarn. *Wiseman.*

DETERIORA'TION, *n. s.* From Lat. *deterior*. The act of making, or state of growing worse.

When the *deterioration* of a commodity, seized by an officer, arises from the fault of the keeper, he is answerable for the same. *Dr. A. Rees.*

DETER'MINE, *v. a.* & *v. n.* }
DETER'MINATE, *v. a.* & *adj.* }
DETER'MINATELY, *adv.* } Fr. *determiner*; Span. *determinar*;
DETERMINA'TION, *n. s.* } Ital. and Lat.
DETER'MINATIVE, *n. s.* & *adj.* } *determinare*,
DETERMINA'TOR. } from *de* and *terminus*; Gr. τερμα, a bound. To mark or fix a bound; hence to conclude; settle; adjust generally; and to choose or influence choice. As a neuter verb, to conclude; settle an opinion; decide and resolve. Determinate and determine seem synonymous as verbs active, but the former is obsolete.

And maad of oon al the kynde of men to enhabite on all the face of the erthe, *determynynge* tymes ordeyned and teermys of the dwellyng of hem. *Wiclif. Dedis.* xvii.

Jonathan knew that it was *determined* of his father to slay David. 1 *Sam.* xx. 33.

In those errors they are so *determinately* settled, that they pay unto falsity the whole sum of whatsoever love is owing unto God's truth. *Hooker.*

Now, noble peers, the cause why we are met
Is to *determine* of the coronation. *Shakspeare.*

I' the progress of this business,
Ere a *determinate* resolution, he,
I mean the bishop, did require a respite. *Id.*

The fly-slow hours shall not *determinate*
The dateless limit of thy dear exile. *Id.*

They have acquainted me with their *determination*, which is to go home, and trouble you no more. *Id. Merchant of Venice.*

The knowledge of men hitherto hath been *determined* by the view or sight; so that whatsoever is invisible, either in respect of the fineness of the body itself, or the smallness of the parts, or of the subtilty of the motion, is little enquired. *Bacon.*

They were apprehended, and, after conviction, the danger *determined* by their deaths. *Hayward.*

Eve! now expect great tidings, which perhaps
Of us will soon *determine* or impose
New laws to be observed. *Milton.*

The proper acts of the intellect are intellection, deliberation, and *determination*, or decision. *Hale's Origin of Mankind.*

Whether all plants have seeds, were more easily *determinable*, if we could conclude concerning harts-tongue, ferne, and some others. *Browne's Vulgar Errours.*

Like men disused in a long peace, more *determinate* to do, than skilful how to do. *Sidney.*

Think thus with yourselves, that you have not the making of things true or false; but that the truth and existence of things is already fixed and settled, and that the principles of religion are already either *determinately* true or false, before you think of them. *Tillotson.*

Revolutions of state, many times, make way for new institutions and forms, and often *determine* in either setting up some tyranny at home, or bringing in some conquest from abroad. *Temple.*

A man may suspend the act of his choice from being *determined* for or against the thing proposed, till he has examined it. *Locke.*

Demonstrations in numbers, if they are not more evident and exact than in extension, yet they are

more general in their use, and *determinate* in their application. *Id.*

As soon as the studious man's hunger and thirst makes him uneasy, he, whose will was never *determined* to any pursuit of good cheer, is, by the uneasiness of hunger and thirst, presently *determined* to eating and drinking. *Id.*

When we voluntarily waste much of our lives, that remissness can by no means consist with a constant *determination* of will or desire to the greatest apparent good. *Id.*

That individual action, which is justly punished as sinful in us, cannot proceed from the special influence and *determinative* power of a just cause.
Bramhall against Hobbes.

All pleasure springing from a gratified passion, as most of the pleasure of sin does, must needs *determine* with that passion. *South.*

Probability, in the nature of it, supposes that a thing may or may not be so, for any thing that yet appears, or is certainly *determined*, on the other side. *Id.*

Destruction hangs on every word we speak,
On every thought, till the concluding stroke
Determines all, and closes our design. *Addison.*

No sooner have they climbed that hill, which thus *determines* their view at a distance, but a new prospect is opened. *Atterbury.*

To make all the planets move about the sun in circular orbs, there must be given to each, by a *determinate* impulse, those present particular degrees of velocity which they now have, in proportion to their distances from the sun, and to the quantity of the solar matter. *Bentley.*

Consult thy judgment, affections, and inclinations, and make thy *determination* upon every particular; and be always as suspicious of thyself as possible.
Calamy.

He confined the knowledge of governing to justice and lenity, and to the speedy *determination* of civil and criminal causes. *Gulliver's Travels.*

The long dispute among the philosophers about a vacuum, may be *determined* in the affirmative; that it is to be found in a critic's head. *Swift.*

If the term added to make up the complex subject does not necessarily or constantly belong to it, then it is a *determinative*, and limits the subject to a particular part of its extension; as, every pious man shall be happy. *Watts.*

How far this unexpected distinction can be rated among the happy incidents of life, I am not yet able to *determine*. *Johnson. Plan of Dictionary.*

DETERRA'TION, *n. s.* Lat. *de* and *terra*; Fr. *deterrer*. Discovery of any thing by removal of the earth that hides it; the act of unburying.

This concerns the raising of new mountains, *deterrations*, or the devolution of earth down upon the valleys from the hills and higher grounds. *Woodward.*

DETER'SION, *n. s.* } From Lat. *deter-*
DETER'SIVE. *adj.* & *n. s.* } *go*. See DETERGE. The act of cleansing a sore. Having the power to cleanse. An application that cleanses wounds.

I endeavoured *detersion*, but the matter could not be discharged. *Wiseman.*

We frequently see simple ulcers afflicted with sharp humours, which corrode them, and render them painful sordid ulcers, if not timely relieved by *detersives* and lenients. *Id.*

DETEST', *v. a.* }
DETEST'ABLE, *adj.* }
DETEST'ABLY, *adv.* }
DETESTA'TION, *n. s.* }
DETEST'ER. } Fr. *detester*; Span. *detestar*; Lat. *detestare*, according to Minsheu, from *deum testari (odiosum illud est)*, a form of declaring hatred to, and innocence of any crime. Detestatio was the swearing a thing to be hateful and odious. To hate; abominate: hateful; abhorred: a detester is one who hates or abhors.

He was deadly made,
And all that life preserved did *detest*.
Faerie Queene.

That *detestable* sight him much amazd,
To see the' unkindly imps of heaven accurst
Devoure their dam. *Spenser. Faerie Queene.*

I 've lived in such dishonour, that the gods
Detest my baseness. *Shakspeare.*

Glory grows guilty of *detested* crimes,
When for fame's sake, for praise, an outward part,
We bend to that the working of the heart. *Id.*

He desired him to consider that both armies consisted of Christians, to whom nothing is more *detestable* than effusion of human blood. *Hayward.*

Then only did misfortune make her see what she had done, especially finding in us rather *detestation* than pity. *Sidney.*

There is that naturally in the heart of man which abhors sin as sin, and consequently would make him *detest* it both in himself and others too. *South.*

Who dares think one thing, and another tell,
My heart *detests* him as the gates of hell. *Pope.*

Our love of God will inspire us with a *detestation* for sin, as what is of all things most contrary to his divine nature. *Swift.*

It is the peculiar condition of falsehood, to be equally *detested* by the good and bad. *Johnson.*

The *detestable* maxim, Qui nescit dissimulare nescit regnare, will not be heard of in heaven. *Bp. Watson.*

DETHRONE, *v. a.* Fr. *detroner*; *de* and throne (Lat. *thronus*). To divest of regal dignity.

The queen became the object of public hatred, the *dethroned* king was regarded with pity. *Hume.*

DETIN'UE, *n. s.* Fr. *detenue*. A writ that lies against him, who, having goods or chattels delivered him to keep, refuses to deliver them again.

DETINUE lies for any thing certain and valuable, wherein one may have a property or right; as for a horse, cow, sheep, hens, dogs, jewels, plate, cloth, bags of money, sacks of corn, &c. It must be laid so certain, that the thing detained may be known and recovered: and therefore, for money out of a bag, or corn out of a sack, &c., it lies not; for the money or corn cannot in this case be known from other money or corn; so that the party must have an action on the case, &c. Yet detinue may be brought for a piece of gold of the price of 22*s*. though not for 22*s*. in money. In this action, the thing detained is generally to be recovered, and not damages; but if one cannot recover the thing itself, he shall recover damages for the thing, and also for the detainer.

DET'ONATE, *v. n.* }
DETONA'TION, *n. s.* }
DET'ONISE, *v. a.* } Lat. *detono*, from *de* emphatic, and *tonus*, a sound. To thunder or make a great noise. It is used for various explosions in chemistry. To detonise is to calcine with detonation.

A new coal is not to be cast on the nitre, till the *detonation* occasioned by the former be either quite or almost altogether ended; unless it chance that the puffing matter do blow the coal too soon out of the crucible. *Boyle.*

ineteen parts in twenty of *detonized* nitre is destroyed in eighteen days. *Arbuthnot on Air.*

The nitrates yield oxygen gas mingled with nitrogen gas by the action of fire; they give out a white vapour of nitric acid when acted on by concentrated sulphuric acid; and, when mixed with combustible substances, produce, at a red heat, inflammation and *detonation.* *Parke's Chemical Catechism.*

DETONATION, in chemistry, signifies an explosion with noise made by the sudden inflammation of some combustible body: such as are the explosions of gunpowder, and fulminating powders. See CHEMISTRY.

DETORT', *v. a.* Lat. *detortus*, of *detorqueo*. To wrest from the original import, meaning, or design.

They have assumed what amounts to an infallibility in the private spirit, and have *detorted* texts of scripture to the sedition, disturbance, and destruction of the civil government. *Dryden.*

DETOUR DES ANGLOIS, or English Turn, a circular direction of the river Mississippi, in North America, so very considerable, that vessels cannot pass it with the same wind that conducted them to it, and must either wait for a favorable wind, or make fast to the bank, and haul close; there being sufficient depth of water for any vessel that can enter the river. The two forts and batteries at this place on both sides the river, are more than sufficient to stop the progress of any vessel whatever. Dr. Cox, of New-Jersey, ascended the Mississippi to this place, anno 1698, took possession, and called the country Carolina. It lies eighteen miles below New Orleans, and eighty-seven above the Balize.

DETRACT' *v. a.* / DETRACT'ER, *n. s.* / DETRACT'ION, / DETRAC'TIOUS, *adj.* / DETRACT'ORY, / DETRACT'RESS, *n. s.* } Fr. *detracter;* Span. *detratar;* Lat. *detrahere*, from *de* (downward) and *trahere;* Gr. δρασσω, to draw. To take away or subtract; generally to take away, or derogate from, character. Detractory, and detractious, alike mean, dishonorable to character.

Lest perauenture stryuyngis, enuyes, sturdnessis, dissenciouns, and *detraccious*, priuy spechis of discord ben among ghou. *Wiclif.* 1 *Cor.* 12.

I am right glad to be thus satisfied, in that I yet was never able till now to choke the mouth of such *detracters* with the certain knowledge of their slanderous untruths. *Spenser on Ireland.*

I put myself to thy direction, and
Unspeak mine own *detraction;* here abjure
The taints and blames I laid upon myself,
For strangers to my nature. *Shakspeare.*

Those were assistants in private, but not trusted to manage the affairs in publick; for that would *detract* from the honour of the principal ambassador. *Bacon.*

You shall enquire of the unlawful taking of partridges, and pheasants, or fowl, the *detraction* of the eggs of wild-fowls, &c. *Id.*

By the largeness of the cornices they hinder both the light within, and likewise *detract* much from the view of the front without. *Wotton.*

Fame, that her high birth to raise
Seemed erst so lavish and profuse,
We may justly now accuse
Of *detraction* from her praise. *Milton*

The painters are most envious, if they want
Good colours for preferment; virtuous ladies
Love this way to be flattered, and accuse
The workman of *detraction*, if he add not
Some grace they cannot truly call their own.
Massinger.

This is not only derogatory unto the wisdom of God, who hath proposed the world unto our knowledge, and thereby the notion of himself; but also *detractory* unto the intellect and sense of man. *Browne.*

The multitude of partners does *detract* nothing from each private share, nor does the publickness of it lessen propriety in it. *Boyle.*

No envy can *detract* from this: it will shine in history, and, like swans, grow whiter the longer it endures. *Dryden.*

Away the fair *detracters* went,
And gave by turns their censures vent.
Swift.

If any shall *detract* from a lady's character, unless she be absent, the said *detractress* shall be forthwith ordered to the lowest place of the room. *Addison.*

The *detractory* lye takes from a great man the reputation that justly belongs to him. *Arbuthnot.*

Detraction, in the native importance of the word, signifies the withdrawing or taking off from a thing; and, as it is applied to the reputation, it denotes the impairing or lessening a man in point of fame, rendering him less valued and esteemed by others, which is the final aim of *detraction.* *Ayliffe.*

Hard is his fate on whom the public
Is fixed for ever to *detract* or praise;
Repose denies her requiem to his name,
And folly loves the martyrdom of Fame. *Byron.*

DETRANCHE, in heraldry, a line bendwise, proceeding always from the dexter side, but not from the very angle diagonally athwart the shield.

DET'RIMENT, *n. s.* / DETRIMEN'TAL, *adj.* } Fr. *detriment;* Spa. Portug. and Ital. *detrimento;* Lat. *detrimentum*, from *detero, detritus*, worn, because that which is worn is thereby injured. Injury; diminution; harm. Detrimental is, mischievous; causing injury.

Difficult it must be for one Christian church to abolish that which all had received and held for the space of many ages, and that without any *detriment* unto religion. *Hooker.*

I can repair
That *detriment*, if such it be, to lose
Self-lost. *Milton.*

He with the foe began to buckle,
Vowing to be revenged for breach
Of crowd and skin upon the wretch,
Sole author of all *detriment*
He and his fiddle underwent. *Hudibras.*

Let a family burn but a candle a night less than the usual number, and they may take in the Spectator without *detriment* to their private affairs. *Addison.*

Obstinacy in prejudices, which are *detrimental* to our country, ought not to be mistaken for virtuous resolution and firmness of mind. *Id.*

And the reason seems to be, because an apprehension of the displeasure of their superiors, and the *detrimental* consequences which may accrue from thence, may be a check upon them, and engage them to pay the just regards which they expect. *Muson.*

DETRITION, *n. s.* Lat. *detero, detritus*, from *de* and *tero*; Gr. τερω, to rub. The act of wearing away.

DETROIT RIVER, or Strait of St. Clair, the strait or river which flows from lake St. Clair into lake Erie, and forms part of the boundary between the United States and Upper Canada. It is forty miles long, and the great channel by which the waters of the lakes of Canada, Huron, Superior, and Michigan, are conveyed to the ocean. On the east side cultivation has made great progress.

DETROIT, a flourishing town of the United States, on the west side of the above river. The fort and military works are very strong; but they were taken in 1812, by the British, under general Brock.

DETRUDE', *v. a.* } Lat. *detrudo*; *de* and
DETRU'SION, *n. s.* } *trudo*, to thrust; to push down; the act of thrusting or forcing down.

Philosophers are of opinion, that the souls of men may, for their miscarriages, be *detruded* into the bodies of beasts. *Locke.*

From this *detrusion* of the waters towards the side, the parts towards the pole must be much increased. *Keil against Burnet.*

At thy command the vernal sun awakes
The torpid sap, *detruded* to the root
By wintry winds. *Thomson.*

Such as are *detruded* down to hell,
Either for shame they still themselves retire,
Or, tied in chains, they in close prison dwell.
Davies.

To DETRU'NCATE, *v. a.* } Lat. *detrunco*;
DETRUNCA'TION, *n. s.* } *de* and *trunco*.
To lop; to cut; to shorten by deprivation of parts.

It may sometimes happen by hasty *detruncation*, that the general tendency of a sentence may be changed. *Johnson. Pref. to Dictionary.*

DETTINGEN, a village of Germany, in the electorate of Mentz, situated on the east side of the Maine, where a battle was fought between the English, under the command of king George II. in person and the earl of Stair, and the French, under the command of the duke of Noailles. The English had the honor of the day; but were soon obliged to leave the field of battle, which was taken possession of by the French, who treated the wounded English with great clemency. It is nine miles south of Hanau, and six north-west of Aschaffenburgh. Long. 9° 5′ E., lat. 49° 55′ N.

DETURBATION *n. s.* Lat. *deturbo*. The act of throwing down; degradation.

DEVAPORATION, *n. s.* Lat. from *de* and *vapor*. The condensation of vapor.

For the wind blows uniformly upon this hot part of the coast of Peru, but no cause of *devaporation* occurs till it begins to ascend the mountainous Andes, and then its own expansion produces cold sufficient to condense its vapour. *Darwin.*

DEVAPRAYAGA, a town of the province of Serinaghur, Northern Hindostan, situated at the junction of two branches of the most sacred part of the Ganges. It is built on the side of a mountain, about 100 feet above the stream. The houses are of stone, covered with shingles. The celebrated temple of Ramachandra, containing a statue of the deity, of black stone, is constructed of large blocks of cut stone, piled up, without mortar, to the height of sixty feet. It is at the upper part of the town, and surrounded by twenty-five villages, which belong to the Brahmins. This place suffered much by an earthquake in 1803.

DEVASTATION, *n. s.* Lat. *devasto, de* and *vastus*. Waste; havock; desolation; destruction.

By *devastation* the rough warrior gains,
And farmers fatten most when famine reigns *Garth.*

That flood which overflowed Attica, in the days of Ogyges, and that which drowned Thessaly in Deucalion's time, made cruel havock and *devastation* among them. *Woodward.*

If it excite a man to wicked attempts, make him willing to sacrifice the esteem of all wise and good men to the acclamations of a mob; to overleap the bounds of decency and truth, &c. it is then not only vanity but vice; a vice, which of all others hath made the greatest havock and *devastation* among men. *Mason.*

DEUCALION, king of Thessaly, is said to have been the son of Prometheus. A flood recorded to have happened in this time (about A. A. C. 1500), is supposed to have been only an inundation of the neighbouring country, occasioned by heavy rains, and an earthquake that stopped the course of the river Peneus. He governed his people, we are told, with great equity; but the rest of mankind, being extremely wicked, were destroyed by a flood, while Deucalion and Pyrrha his queen saved themselves by ascending mount Parnassus. When the waters decreased, they went and consulted the oracle of Themis, on the means by which the earth was to be repeopled, and were ordered to veil their heads and faces, to unloose their girdles, and throw behind their backs the bones of their great mother. At this advice Pyrrha was seized with horror; but Deucalion explained the mystery, by observing, that their great mother must mean the earth, and her bones the stones; when taking them up, those Deucalion threw over his head became men, and those thrown by Pyrrha women. M. Bryant and others have supposed, that Deucalion was the same with the patriarch Noah; and that his flood in Thessaly, and those of Ogyges in Attica, and Prometheus in Egypt, were the same with that of Noah recorded in Scripture. See DELUGE.

DEUCE, Goth. *dus*; Lat. *dusius*; Arm. *teus*, once applied to good as well as evil spirits. See DEMON.

'Twas the prettiest prologue, as he wrote it;
Well, the *deuce* take me if I ha'n't forgot it.
Congreve.

DEUCE, *n. s.* Fr. *deux*. Two: a word used in games.

You are a gentleman and a gamester; then, I am sure, you know how much the cross sum of *deuce* ace amounts to. *Shakspeare.*

DEVE'LOP, *v. a.* Fr. *developer*; Lat. *develo* To disengage from something that enfolds or conceals; to disentangle.

Take him to *develop*, if you can,
And hew the block off, and get out the man.
Duncia'.

In his eye
And nostril, beautiful disdain, and might,
And majesty, flash their full lightnings by,
Developing in that one glance the Deity. *Byron.*

DEVENTER, the capital of a district in the province of Overyssel, Netherlands, situated in a fertile country, on the right bank of the river Yssel, is not a town of great size, but is strong, being surrounded by a wall, well flanked with towers, and defended with broad and deep ditches. The cathedral is a fine structure. There are besides three parish churches, and several convents; and an athenæum, or provincial academy. The manufacture of this place is linen, and the trade is in butter, cheese, and cattle. There is a beautiful promenade on the Yssel. Population 10,100. It is eight miles N. N. W. of Zutphen, and forty-six east of Amsterdam.

DEVEREUX (Robert), earl of Essex. See Essex.

DEVE'ST, *v. a.* Fr. *dévestir*; Lat. *de* and *vestis*. See Divest. To strip; to deprive of clothes.

What are those breaches of the law of nature and nations, which do forfeit and *devest* all right and titl in a nation to government? *Bacon.*

Friends all but now,
In quarter and in terms, like bride and groom
Devesting them for bed. *Shakspeare.*

Come on, thou little inmate of this breast,
Which for thy sake from passions I *devest*. *Prior.*

DEVE'X, *adj.* } Lat. *devexus*. Bending
Deve'xity, *n. s.* } down; declivous; incurvated downwards; declivity.

DE'VIATE, *v. n.* } Lat. *de viâ decedere*.
Devia'tion, *n. s.* } To wander from the
De'vious, *adj.* } right or common way; to go astray.

In this minute *devious* subject, I have been necessitated to explain myself in more words than may seem needful. *Holder.*

A story should, to please, at least seem true,
Be apropos, well told, concise, and new:
And whensoe'er it *deviates* from these rules,
The wise will sleep, and leave applause to fools.
Stillingfleet.

The rest to some faint meaning make pretence,
But Shadwell never *deviates* into sense. *Dryden.*

Some lower muse, perhaps, who lightly treads
The *devious* paths where wanton fancy leads. *Rowe.*

What makes all physical and moral ill?
There Nature *deviates*, and here wanders Will. *Pope.*

These bodies constantly move round in the same tracks, without making the least *deviation*. *Cheyne.*

One *devious* step at first setting out, frequently leads a person into a wilderness of doubt and error. *Clarissa.*

Worthy persons, if inadvertently drawn into a *deviation*, will endeavour instantly to recover their lost ground, that they may not bring error into habit. *Id.*

Every muse,
And every blooming pleasure, wait without
To bless the wildly *devious* morning walk.
Thomson.

To what gulfs
A single *deviation* from the track
Of human duties leads even those who claim
The homage of mankind as their born due,
And find it, till they forfeit it themselves!
Byron.

DEVICE', *n. s.* See Devise.

DEV'IL, } Goth. *diofl*; Sax. *diofol*;
Dev'ilish, *adj.* } Teut. *teuffel*; Irish *duol*;
Dev'ilishly, *adv.* } Belg. *duvell*; Fr. *diable*; Span. *diablo*, from Lat. *diabolus*; Gr. διαβολος, διαβαλλω, from δια, through and βαλλω, to cast; to strike through as with a dart; and thence as with slander. The great spiritual enemy of man, called in Scripture 'an accuser;' a term of reproach, expressing extreme wickedness, real, or supposed: a ridiculous expletive: the adjective and adverb seem plain.

Clothe ghou with the armure of God, that ghe moun stande aghens aspiyngis of the *deuel*.
Wiclif. Effesies 6.

Have not I chosen you twelve, and one of you is a *devil*? *Bible. John* vi. 70.

This wisdom descendeth not from above, but is earthly, sensual, *devilish*. *Id. James* iii. 15.

For grief thereof and *devilish* despight,
From his infernal furnace forth he threw
Huge flames, that dimmed all the heaven's light,
Enrolled in duskish smoke and brimstone blue.
Spenser.

The *devil* was ill and the *devil* a monk would be,
The *devil* was well the *devil* a monk was he.
Old Proverb.

See thyself, *devil*;
Proper deformity seems not in the fiend
So horrid as in woman. *Shakspeare.*

A *devilish* knave! besides, the knave is handsome, young, and blyth; all those requisites are in him that delight. *Id.*

Worldly wealth is the *devil's* bait; and those whose minds feed upon riches, recede, in general, from real happiness, in proportion as their stores increase; as the moon when she is fullest of light is farthest from the sun. *Burton.*

Be frustrate all ye stratagems of Hell,
And *devilish* machinations come to nought.
Milton.

Those trumpeters threatened them with continual alarms of damnation, if they did not venture life, fortune, and all, in that which wickedly and *devilishly* those impostors called the cause of God. *South.*

The things, we know, are neither rich nor rare;
But wonder how the *devil* they got there! *Pope.*

With all these tokens of a knave complete,
If thou art honest, thou 'rt a *devilish* cheat.
Addison.

Devil, an evil angel, one of those celestial spirits cast down from heaven for aspiring to be equal with God. The Ethiopians paint the devil white. Satan and Belial are equivalent to this term in the Old Testament: nor do we meet with it in any heathen authors, in the sense it is taken among Christians, that is, as a creature revolted from God, although their theology was familiar with evil genii and dæmons. See Dæmon and Dæmoniac. Some of the aboriginal nations of America have a notion of two collateral independent beings, one of whom is good, and the other evil; which last they imagine has the superintendance of the earth, for which reason they chiefly worship him; and hence they have been said to worship the devil. The Chaldeans and Persians, in like manner, believed in both a good principle and an evil one; which last they imagined was an enemy to mankind. Isaiah, according to some commentators, when speaking of

the fall of the king of Babylon, alludes to that of the devil, calling him Lucifer, son of the morning. The Arabians call Lucifer, Eblis; which some writers suppose to be a diminutive or corruption of the word Diabolus.

DEVIL IN A BUSH, in botany. See NIGELLA.

DEVISE', *v. a.* } Fr. *deviser;* Span. and
DEVI'SER, *n. s.* } Portug. *devisar*, according
DEVICE', *n. s.* } to Skinner, from Lat. *devisare*, to look about. To contrive; consider: a device is the scheme or plan contrived: hence also a sketch or drawing on a shield; a token.

Behold I frame evil against you, and *devise* a *device* against you. *Jer.* xiii. 11.

Her merry fit she freshly 'gan to rear,
And did *of* joy and jollity *devise*,
Herself to cherish and her guest to chear.
Faerie Queene.

At last the nourse in her fool hardy wit
Conceived a bold *devise*, and thus bespake. *Id.*

Touching the exchange of laws in practice with laws in *device*, which they say are better for the state of the church, if they might take place; the farther we examine them, the greater cause we find to conclude, although we continue the same we are, the harm is not great. *Hooker.*

Devise but how you'll use him when he comes, and let us two *devise* to bring him thither. *Shakspeare.*

He's gentle; never schooled, and yet learned; full of noble *device*, of all sorts enchantingly beloved. *Id.*

This is our *device*,
That Falstaff at that oak shall meet with us. *Id.*

Being divided from truth in themselves, they are yet farther removed by advenient deception; for true it is, if I say they are daily mocked into error by *deviers*. *Browne.*

Then change we shields and their *devices* bear;
Let fraud supply the want of force in war. *Dryden.*

The authors of useful inventions, the *deviers* of wholesome laws, as were the philosophers of antient times, were honoured as the fathers and prophets of their country. *Grew.*

Hibernia's harp, *device* of her command,
And parent of her mirth, shall there be seen.
Prior.

He intended it as a politick *device* to lessen their interest, and keep them low in the world. *Atterbury.*

Ye sons of art, one curious piece *devise*,
From whose constructure motion shall arise.
Blackmore.

A tavern with a gaudy sign,
Whose bush is better than the wine,
May cheat you once—will that *device*,
'Neat as imported,' cheat you twice? *Garrick.*

DEVICE, in heraldry, painting, and sculpture, an emblem used to represent a certain family, person, action, or quality; with a suitable motto, applied in a figurative sense. The essence of a device consists in metaphorical similitude between the things representing and represented: thus a young nobleman, of great courage and ambition, is said to have borne his device, in a carousal at the court of France, a rocket mounted in the air, with this motto in Italian, 'poco duri purche m'inalzi;' importing, that he preferred a short life, provided he might thereby attain to glory and eminence. The Italians have reduced the making of devices into an art.

DEVI'SE, *v. a.* & *n. s.* } Old Fr. *devise*, a
DEVISEE', *n. s.* } will. To give by will; the act of giving or bequeathing by will: devisee, he to whom something is bequeathed by will. Devisour, he who bequeaths it.

The alienation is made by *devise* in a last will only, and the third part of these profits is there demandable. *Locke.*

This word *devisee* is properly attributed, in our common law, to him that bequeaths his goods by his last will or testament in writing; and the reason is, because those that now appertain only to the *devisour*, by this act are distributed into many parts. *Cowell.*

DE'VITABLE, *adj.* } Lat. *devitabilis*. Pos-
DEVITA'TION, *n. s* } sible to be avoided; avoidable: the act of escaping or avoiding.

DEVIZES, a town of Wiltshire, six miles north from Lavington, and eighty-nine west from London. It contains two churches and a chapel, besides a place of worship for dissenters, and returns two members to parliament. Here was formerly a castle, supposed to be one of the strongest in England; but it is now nearly destroyed. Two markets are held weekly, one on Monday, principally for butcher's meat; the other on Thursday for corn, wool, cattle, &c., considered one of the best in England. Considerable manufactures are carried on, particularly of serges, kerseymeres, and broad-cloth. In the market place is erected a stone with an inscription, as a memorial of divine vengeance inflicted on a woman who called God to witness a falsehood concerning some money. The corporation consists of a mayor, recorder, ten magistrates, and twenty-four common-council-men. The number of burgesses is unlimited, and they have a right to vote for representatives in parliament as soon as they are made free. Its name is to be derived from the Latin divisæ, divided, from its having been anciently divided between the king and the bishop of Salisbury; and it is supposed to have been the Punctuobice of Ravennus. The Romans enclosed it with a vallum and ditch, in which there is now a road almost round the town. Brass figures of household gods, coins, bricks, and urns, evidently Roman, have been dug up here.

DEVOID', *adj.* Fr. *vuide*. Empty; vacant; void.

When I awoke and found her place *devoid*,
And nought but pressed grass where she had lyen,
I sorrowed all so much as earst I joyed.
Faerie Queene

That the soul and angels are *devoid* of quantity and dimension, and that they have nothing to do with proper locality, is generally opinioned. *Glanville.*

The motion of this chariot will still be easier as it ascends higher, till at length it shall become utterly *devoid* of gravity, when the least strength will be able to bestow upon it a swift motion. *Wilkins's Math. Magick.*

We Tyrians are not so *devoid* of sense,
Nor so remote from Phœbus' influence. *Dryden.*

DEVOIR', *n. s.* Fr. *devoir*; Lat. *debere* To owe service.

Do now your *devoir*, yonge knights proude.
Chaucer. Cant. Tales.

To restore again the kingdom of the Mamalukes, he offered him their utmost *devoir* and service. *Knolles.*

Gentlemen, who do not design to marry, yet pay their *devoirs* to one particular fair. *Spectator.*

Awkward and supple, each *devoir* to pay,
She flatters her good lady twice a-day. *Pope.*

DEVOLVE' *v. a.* & *n. s.* } Lat. *devolvo; de* and *volvo*, to roll.
DEVOLU'TION, *n. s.* }

To roll down or upon; hence, to give in succession. Devolution is the art of so removing or giving, or the removal so effected.

The jurisdiction exercised in those courts is derived from the crown of England, and the last *devolution* is to the king by way of appeal. *Hale.*

Upon the duke of Ormond the king had wholly *devolved* the care and disposition of all affairs in Ireland. *Temple.*

Because they found too much confusion in such a multitude of statesmen, they *devolved* their whole authority into the hands of the council of sixty. *Addison.*

The raising of new mountains, deterrations, or the *devolution* of earth down upon the valleys from the hills and high grounds, will fall under our consideration. *Woodward.*

Thro' splendid kingdoms he *devolves* his maze,
Now wanders wild through solitary tracts
Of life-deserted sand. *Thomson.*

Supposing people, by wanting spiritual blessings, did lose all their right to temporal, yet that forfeiture must *devolve* only to the supreme Lord. *Decay of Piety.*

Guide my way
Through fair Lyceum's walk, the green retreats
Of Academus, and the thymy vale
Where oft, enchanted with Socratic sounds,
Ilissus pure *devolved* his tuneful stream
In gentler murmurs. *Byron.*

DEVON, a river of Scotland, in the counties of Perth and Clackmannan, which rises in the Ochil hills, and, after running ten miles directly east, makes a turn to the west at a place hence called the Crook of Devon; then passes through the vale of Glendovan to the Rumbling Bridge and Caldron Linn, where it forms a scenery, wild, beautiful, and romantic.

DEVONSHIRE is a maritime county, one of the most valuable in England; and is bounded on the north and north-west by the Bristol Channel; on the west by Cornwall, the river Tamar, and a small rivulet called Marsland Water; on the south and south-east it is skirted by the British Channel; on the east and north-east it borders on the counties of Dorset and Somerset, the dividing limits being artificial. In point of extent this county is second only to Yorkshire, and the fourth in population. Its greatest length, which is from north to south, is about seventy-three miles; and its greatest breadth, from east to west, sixty-five miles. It contains about 1,600,000 acres, or upwards of 2,493 square miles. This county is divided into thirty-three hundreds, 349 parishes, 117 vicarages, 1733 villages, one city, and thirty-seven market towns. It is in the diocese of Exeter, and the western circuit of the province of Canterbury.

It was incorporated by the Romans with Cornwall, under the general appellation of Danmonium; its original name being Dyvnaint, signifying deeps or hollows. During the Heptarchy it belonged to the West Saxons, and was then called Devonscyre. It was included in the first Roman district, or Britannia Prima.

The climate of Devonshire differs materially in the northern and southern districts. It is, however, in general mild and genial. The northern district, considered in its most extensive sense, as comprehending the whole district between Dartmoor and the British Channel, but, more generally speaking, embracing only the parts round Biddeford, Barnstaple, South Moulton, and the north coasts, is by no means comparable to the temperature which characterises the southern parts of the county; yet even here, and along the sea coasts, from the northern extremity of the district to the most southern, snow seldom lies longer than a few hours, except indeed on the summits of some of the high hills. In the southern parts the progress of vegetation is but little impeded during winter, and the ground almost constantly wears an aspect of verdure and beauty. The climate of Devonshire has been frequently recommended by the faculty as preferable for delicate invalids, even to Lisbon or the South of France. The face of the country is exceedingly varied and uneven. The heights in many parts, but particularly in Dartmoor and its vicinity, swell into mountains; the altitudes of the principal eminences being from 1500 to 1800 feet. 'On approaching this tract from the south and south-east, the eye is bewildered by an extensive waste, exhibiting gigantic tors, large surfaces covered with masses of scattered granite, and immense rocks, which seem to have been precipitated from the steep declivities into the valleys. These huge and craggy fragments are spread confusedly over the ground, and have been compared to the ponderous masses ejected by volcanoes, to the enormous ruins of formidable castles, and to the wrecks of mountains torn piecemeal by the raging elements.' Taking the plane of high water in the Bristol Channel as a base, it appears that the highest hill, which is Dunkery Beacon, on part of Exmoor Forest, is 1890 feet; the next, Castle Head-down, High Bray parish, 1500 feet. The lowest, which is Hilsborough, overhanging the town of Ilfracombe to the east, is about 300 feet. Exmoor has recently been disforested by act of parliament.

The principal rivers of Devonshire are the Exe, the Torridge, the Teign, the Taw, the Oke, the Dart, the Plym, the Otter, the Axe, and the Tamar: though this last belongs more properly to Cornwall. It forms at its mouth the harbour of Hamoaze, or Plymouth Sound. All these rivers abound in fine salmon. Sufficient attention does not appear to have been paid to the inland navigation of this extensive county, though it contains one of the most ancient specimens of canal navigation in the kingdom: this is the Haven at Exeter, which was formed in the year 1544. It is properly a canal, and conveys shipping from the tideway above Topsham to the quay at Exeter, which is effected by an embanked navigation, with a large lock placed near the middle of the line. The Crediton and Exeter Canal is also a fine work; as is the Tavistock Canal, undertaken in the year 1803, under the superintendance of Mr. John Taylor. The Tamar Canal skirts the western edge of this county.

The principal mineral waters in the county are at Bampton, Cleeve, Lomerton, Lifton and Tavistock.

The soils of this county divide themselves into four kinds, the first of which is found to occupy the smallest space. Risdon, in his Survey of Devon, says that 'on the east side of the shire the mould standeth most upon white chalk, which is passing good for sheep and corn.' The second is the red land, surrounding Exeter, and extending considerably east and west of it; this is deemed good pasture land. The third is the peat soil, of which Dartmoor furnishes the principal example. Of this soil Risdon speaks somewhat disparagingly, saying that it is richer in its bowels than in the face thereof, yielding tin and turf.' The fourth, which pervades by far the greater part of the county, though varied in its appearances by casual admixtures, is what has lately obtained the name of dun-land. It is furnished probably by the decomposition of schistus rock, on which it lies, and is found in almost every state, from the most fertile to the most sterile. The writer of most excellent and accurate 'Remarks on the present State of the County of Devon, introductory to the new edition of Risdon's Survey,' published in 1811, observes that 'the soil most prevalent is remarkable in two circumstances; its rapid spontaneous production of grass when under good management, and its total want of calcareous principle.'

The cattle of Devonshire are in the highest request in all parts of the kingdom; and distinguished by fineness of bone and skin: the sheep are small and subject to the rot. This county has also long been famed for its cyder, which is the beverage of the lower classes. Two hundred years ago, many copyholders might pay their lords' rent with their cyder only. The above writer adds, that 'this is even now probably in some parts and in some seasons the case, though the orchards are not either so large and productive, or so numerous as they used to be.' Much butter is made in the grass lands and that without the churn. This writer has given a truly interesting and scientific outline of the mineralogy of Devon, which, as he very justly observes, is a feature of distinguished importance in this county, whether we regard the value of the mineral productions, or the phenomena which it presents to the scientific enquirer. The general character of this mineralogy is that of an elevated tract of granite, running from north to south across the district, and passing into or under a superstratum of primitive schistus on its western side, and of alluvial sand-stone and chalk on the eastern limits. A vein of culm was found some years ago near Chittlehampton, varying from about four inches to one foot in thickness, and dipping about one foot in three to the southward. It was wrought for a short time, but the expense being considerable, it was abandoned. In Bovey Heathfield, which seems to have been formerly covered by the tide, that remarkable substance called Bovey coal, is found. It runs nine miles to the southward, keeping to the west of large beds of potters' clay. The uppermost strata are within a foot of the surface, and from eighteen inches to four feet thick: the deepest stratum is sixteen feet thick. At the bottom is a bed of clay and sand. This coal retains the vegetable structure, and has the appearance of charred wood, impregnated with bitumen. It is divided into two kinds, the stone coal and the wood coal; the last has more of the peculiar properties. When this coal is burning, a thick heavy smoke, of a fœtid and disagreeable nature, arises from it. The small coal, thrown into a heap, and exposed to the weather, will take fire of itself. Its specific gravity is from 1·4 to 1·558, and its proportion of pure carbon from 54 to 75 per cent.

The chief mineral productions are tin, which the granite hills of Dartmoor have produced probably for many ages, as traces of seam works and mines are to be seen in every part of this immense waste. Stone, which is justly esteemed as the best in existence for the purpose of building where durability is to be regarded. The same kind of granite rock, which produces tin, has also produced some lodes of copper. This county also produces lead and silver; also iron, zinc, antimony, manganese, wolfram, arsenic, and cobalt. 150 miles of this extensive county lies on the sea-coast, and contains many excellent bays, harbours, and sea-ports, of which the principal, and one of the best in the world, is that of Devonport (late Plymouth Dock). See PLYMOUTH. The coasts, as well as the rivers, abound with fish, and particularly the southern coast. Torbay is famous for its fine soles and turbot. Plymouth for Johndorey; Topsham, Starcross, and Lympstone for oysters: and the rare fish, opah and torpedo, are sometimes caught on the coasts. Its pleasant situation, and the cheapness of all the necessaries of life, have induced a great number of the nobility and gentry to adorn it with seats.

This county sends twenty-six members to the Imperial Parliament, viz.: two for the county; two for the city of Exeter; two for Totness; two for Plymouth; two for Oakhampton; two for Barnstaple; two for Plympton Earle; two for Honiton; two for Tavistock; two for Ashburton; two for Dartmouth; two for Beeralston; and two for Tiverton.

Of the 'Worthies of Devon,' collected down to the commencement of the eighteenth century, in a folio volume, by the Rev. John Prince, we can only mention the following:—Sir John Fortescue Aland, an able judge; Bishop Barrington; Archbishop Baldwin, who accompanied Richard I. to the Holy Land, and died there in 1191; Henry de Bathe, a learned judge, who died 1261; Lady Mary Chudleigh; John Churchill, the immortal duke of Marlborough; The Rev. archdeacon Conant, on whom his friend Dr. John Prideaux used thus admirably to pun, 'Conanti nihil est difficile;' William Courtney, archbishop of Canterbury, who condemned Wicliffe and his followers; Mrs. Hannah Cowley, an ingenious dramatic writer; John Davis, the navigator who discovered the well-known straights in North America, which bear his name; Sir Francis Drake; John Dunning, lord Ashburton; Sir John Fortescue; Monk, duke of Albemarle; Sir Walter Raleigh; Sir Joshua Reynolds, &c. &c.

The principal manufactures of the county are serges, kerseys, shalloons, broad-cloth, and blond lace, in which, and in corn, cattle, fish, and its mineral productions, the inhabitants carry on a considerable trade. Barnstaple potteries have increased of late years; they consist of dairy and kitchen utensils. There is a considerable ship-building trade at Barnstaple. The woollen cloth manufactures at Tiverton, Great Torrington, and the wool-combing of Chumleigh were formerly extensive, but have now decayed or vanished. There is, however, a considerable trade in the gloving business at the former place. The iron, cordage works, &c., for the Royal Dockyard at Plymouth, have long been extensive sources of manufacture. Serges are manufactured at Totness, Moreton, Hempstead, Chafford, and other places; and the long ells of Devonshire have been long known. Silk and porcelain have been deemed the principal manufactures of the county; but the productions from the minerals of the county are perhaps equal to any, excepting indeed the woollen manufactory. There is also a considerable quantity of yarn manufactured in the county, as well as of laces.

DEVONSHIRE (Georgiana, duchess of), was the eldest daughter of John earl Spencer, and born June 9th, 1757. She married, in 1774, William duke of Devonshire, and was long the object of attraction to the fashionable world, and the patroness of taste in the fine arts. She became well acquainted with the history and polity of nations, but the belles lettres principally attracted her regard. She left an elegant poem on the passage of Mount St. Gothard, which Delille translated into French. She died at Devonshire House, Piccadilly, March 30th, 1806.

DEVORA'TION, *n. s.* See DEVOUR.

DEVO'TE, *v. a.* & *adj.* DEVOTEE', *n. s.* DEVO'TEDNESS, *n. s.* DEVO'TION, *n. s.* DEVO'TIONAL, *adj.* DEVO'TIONALIST, *n. s.* Lat. *devoveo, devotus;* to vow. To dedicate to divine or superior service; hence to appropriate in any particular manner: to resign. Hence, also, to doom, to execrate. A devotee, Dr. Johnson defines as one erroneously or superstitiously religious; but it is also used for one warm in religion generally. Devotion is the act, habit, or state, of being devoted or given up to; devotional pertaining to devotion; devotionalist, synonymous with devotee.

With *deuocion* we han avowid, that we schulen not taaste ony thing til we sleen poul.
Wiclif. Dedis, 23.

No *devoted* thing that a man shall *devote* unto the Lord, of all that he hath, both of man and beast, and of the field of his possession, shall be sold or redeemed.
Lev. xxvii. 21.

They tied were to stedfast chastity,
And continence of life, that all forgon,
They mote the better tend to their *devotion*.
Spenser. Faerie Queene.

Religious minds are inflamed with the love of publick *devotion*. *Hooker.*

What black magician conjures up this fiend,
To stop *devoted* charitable deeds? *Shakspeare.*

Be opposite all planets of good luck
To my proceeding, if, with pure heart's love,
Immaculate *devotion*, holy thoughts,
I tender not thy beauteous princely daughter.
Id.

Nor are the soberest of them so apt for that *devotional* compliance and juncture of hearts, which I desire to bear in holy offices, to be performed with me.
King Charles.

In vain doth man the name of just expect,
If his *devotions* he to God neglect. *Denham.*

To destruction sacred, and *devote*,
He with his whole posterity must die.
Milton.

Grateful to acknowledge whence his good
Descends, thither with heart, and voice, and eyes
Directed in *devotion*, to adore
And worship God supreme, who made him chief
Of all his works. *Id.*

Whatever may fall from my pen to her disadvantage, relates to her but as she was, or may again be, an obstacle to your *devotedness* to seraphick love.
Boyle.

He had a particular reverence to the person of the king, and the more extraordinary *devotion* for that of the prince, as he had had the honour to be trusted with his education *Clarendon.*

Goddess of maids, and conscious of our hearts,
So keep me from the vengeance of thy darts,
Which Niobe's *devoted* issue felt,
When, hissing through the skies, the feathered deaths were dealt. *Dryden.*

The owning of our obligation unto virtue, may be styled natural religion; that is to say, a *devotedness* unto God, so as to act according to his will. *Grew.*

Your *devotion* has its opportunity: we must pray always, but chiefly at certain times. *Sprat.*

The favourable opinion and good word of men comes oftentimes at a very easy rate, by a few demure looks, with some *devotional* postures and grimaces.
South.

Let her, like me, of every joy forlorn,
Devote the hour when such a wretch was born;
Like me to deserts and to darkness run. *Rowe.*

From the full choir when loud hosannas rise,
And swell the pomp of dreadful sacrifice;
Amid that scene, if some relenting eye
Glance on the stone where our cold reliques lie,
Devotion's self shall steal a thought from heaven,
One human tear shall drop, and be forgiven.
Pope.

Ah why, Penelope, this causeless fear,
To render sleep's soft blessings insincere?
Alike *devote* to sorrow's dire extreme,
The day reflection and the midnight dream
Id.

Pilgrimages are often either enjoined by confessors, or undergone by *devotees*. *Serce.*

Aliens were *devoted* to their rapine and despight.
Decay of Piety.

Devotion may be considered either as an exercise of publick or private prayers at set times and occasions, or as a temper of the mind, a state and disposition of the heart, which is rightly affected with such exercises.
Law on Christ's Perfection.

With such a cause as yours, my lord, it is not sufficient that you have the court at your *devotion*, unless you can find means to corrupt or intimidate the jury.
Junius.

He sue for mercy! He dismayed
By wild words of a timid maid!
He, wronged by Venice, vows to save
Her sons *devoted* to the grave. *Byron.*

—A mere ideal, unintelligible, notion, fit only for the cloistered monk, or the superstitious *devotee*.
Porteus.

DEVOTION, among the ancient Romans, a kind of sacrifice or ceremony, whereby they consecrated themselves to the service of some person. The ancients thought that the life of one might be ransomed by the death of another; whence these devotions became frequent for the lives of the emperors. Devotion to any particular person was unknown among the Romans till the time of Augustus. The day after the title of Augustus had been conferred upon Octavius, Pacuvius, a tribune of the people, publicly declared, that he would devote himself to Augustus, and obey him at the expense of his life, if he was commanded. This example of flattery was immediately followed by all the rest; till at length it became an established custom never to go to salute the emperor, without declaring that they were devoted to him. Before this, the Roman practice was much more noble and patriotic, viz. that of devoting themselves to their country. See DECIUS.

DEVOUR', *v. a.* } Lat. *devoro*; of Gr.
DEVOUR'ER, *n. s.* } βορα, the food of beasts.
DEVORA'TION, *n. s.* } To eat up ravenously, as a beast or wild animal; to destroy: hence to consume or enjoy with eagerness. Devoration says Dr. Johnson, is 'the act of devouring,' but we have seen no instance of its occurrence.

And I took the book of the aungelis hond and *deuouride* it, and it was in mi mouthe as sweete as hony, and whanne I hadde *deuouride* it mi wombe was bitter.
Wiclif. Apoc. 10.

A fire *devoureth* before them, and behind them a flame burneth. *Joel*, ii. 3.

We've willing dames enough: there cannot be
That vulture in you, to *devour* so many
As will to greatness dedicate themselves,
Finding it so inclined. *Shakspeare*

So looks the pent up lion o'er the wretch
That trembles under his *devouring* paws. *Id.*

Rome is but a wilderness of tygers;
Tygers must prey, and Rome affords no prey
But me and mine: how happy art thou, then,
From these *devourers* to be banished! *Id*

Death stalks behind thee, and each flying hour
Does some loose remnant of thy life *devour*.
Dryden.

Such a pleasure as grows fresher upon enjoyment; and though continually fed upon, yet is never *devoured*.
South.

Notwithstanding that Socrates lived in the time of this *devouring* pestilence at Athens, he never caught the least infection. *Addison.*

Since those leviathans are withdrawn, the lesser *devourers* supply their place: fraud succeeds to violence. *Decay of Piety.*

You, while amazed his hurrying hordes retire
From the fell havoc of *devouring* fire.
Taught the first art! with piny rods to raise
By quick attrition the domestic blaze. *Darwin.*

DEVOUT', *adj.* } Lat. *devotus*. See DE-
DEVOUT'LY, *adv.* } VOTION. Pious; religious; devoted to holy duties.

Her twilights were more clear than our mid-day,
She dreamt *devoutlier* than most use to pray. *Donne.*

Her grace rose, and with modest paces
Came to the altar, where she kneeled; and saint-lik
Cast her fair eyes to heaven, and prayed *devoutly*.
Shakspeare.

One of the wise men having a while attentively and *devoutly* viewed and contemplated this pillar and cross, fell down upon his face. *Bacon.*

Anon dry ground appears, and from his ark
The ancient sire descends with all his train;
Then with uplifted hands, and eyes *devout*,
Grateful to heaven. *Milton.*

For this, with soul *devout*, he thanked the god;
And, of success secure, returned to his abode.
Dryden

Think, O my soul, *devoutly* think,
How, with affrighted eyes,
Thou saw'st the wide extended deep
In all its horrors rise! *Addison.*

We must be constant and *devout* in the worship o our God, and ready in all acts of benevolence to our neighbour. *Rogers.*

To second causes we seem to trust, without expressing, so *devoutly* as we ought to do, our dependance on the first. *Atterbury.*

DEUTEROCANONICAL, from δευτερος, second, and κανονικος, canonical, in the school of theology, an appellation given to certain books of holy scripture, which were added to the canon after the rest; either because they were not written till after the compilation of the canon, or by reason of some dispute about them. The Jews acknowledge several books in their canon, which were later than the rest. They say, that under Ezra a great assembly of their doctors, which they call by way of eminence the great synagogue, made the collection of the sacred books which we now have in the Hebrew Old Testament, including those which were not written before the Babylonish captivity, viz. Ezra, Nehemiah, Esther, Ezekiel, Daniel, Haggai, Zechariah, and Malachi; and the Romish church has since added others to the canon, that were not, and could not be, in the canon of the Jews, being written long after. Such are several of the apocryphal books, as the Maccabees, Ecclesiasticus, Wisdom, &c. Others were added still later. The deuterocanonical books in the modern canon are, the epistle to the Hebrews; those of James and Jude; the second of St. Peter, the second and third of St. John; and the Revelation.

DEUTEROG'AMY, *n. s.* Δευτερος and γαμος A second marriage;

DEUTERON'OMY, *n. s.* Δευτερος νομος. The second book of the law; the fifth book of Moses.

DEUTERONOMY was the last of the five books written by Moses, and contains, as its name imports, the repetition of the law. It was written in the fortieth year after the delivery from Egypt, Moses being then in the 120th year of his age. In the Hebrew it contains eleven paraches, though there are only ten in the editions of the rabbins at Venice, twenty chapters, and 955 verses. In the Greek, Latin, and other versions, it contains thirty-four chapters. The last is not by Moses. Some suppose it was written by Joshua immediately after Moses's death; which is the most probable opinion. Others say it was

added by Ezra. See Pentateuch. This book opens with an interesting address to the Israelites, in which Moses briefly recapitulates the many instances in which they had experienced the divine favor since their departure from Horeb. He describes the success and victories which had marked their progress; and the incredulous murmurs and ingratitude, by which the people had incensed God; so that of the multitude which were brought out of Egypt, few now remained. He proceeds to rehearse the various commandments, statutes, and judgments which had been delivered to them by God, that they might become 'a wise and understanding people;' and while he intersperses with those laws, frequent instances of their past misconduct, he unfolds the glorious attributes of God, and reiterates many persuasive motives. He enjoins them, on their first entrance into Canaan, to give a public display of their reverence for God's law, by erecting stones on which all its words and precepts might be inscribed. He renews the covenant with the people, including all that previously passed at Horeb; and ratifies those assurances of spiritual blessings, long since imparted to Abraham and his descendants. He then, in consistency with the promises and sanctions of both covenants, sets forth, for their instruction, life and good, and death and evil, temporal and eternal recompense, present and future punishment.

DEUTEROPOTMI, in Grecian antiquity, a designation given to such of the Athenians as had been thought dead, and, after the celebration of the funeral rites, unexpectedly recovered.

DEUTERO'SCOPY, *n.s.* Δευτερος and σκοπεω. The second intention; the meaning beyond the literal sense: not in use.

> Not attaining the *deuteroscopy*, or second intention of the words, they are fain to omit their consequences, coherences, figures, or tropologies.
>
> *Browne's Vulgar Errours.*

DEUX Ponts, a ci-devant duchy and principality of Germany, in the circle of the Upper Rhine. It was composed of the ancient county of the same name, and the county of Veldentz, and bounded by the provinces of Alsace and Lorrain on the south and south-west, by the electorate of Treves on the north, and the Lower Palatinate on the east; but much intersected by the possessions of different princes. In the year 1385 it was annexed to the Palatinate. The descendants of the princes palatine having obtained the throne of Sweden, and given three princes to that kingdom, Charles X. XI. and XII., it remained under the dominion of Sweden during that period; but this line becoming extinct, it descended to the house of Birkenfield, in the possession of which it continued till its late subjection to the power of France. The duchy was overrun by the French in 1793, and finally attached to that kingdom in 1797, when it was included in the department of the Sarre and Moselle. It is mountainous, and abounds in mines of copper, mercury, iron, and coals; as well as in vineyards, pastures, and corn-fields, which sufficiently supply the people. The principality, when under the German empire, paid for the Roman month 240 florins, and to the imperial chamber 172 rix-dollars, and thirty-six kruitzers. The revenues were estimated at 500,000 florins. It returned in 1814 to the possession of Austria, and has since been exchanged for other districts with Bavaria. It is now a part of the Bavarian province of the Rhine, and has about 60,000 inhabitants.

Deux Ponts, or Zweybrucken, as the Germans call it, a town of Germany, now annexed to France, and included in the department of Sarre and Moselle, of which it is the capital; as it was, till December, 1797, of the ci-devant duchy. It was the seat of justice for the principality, and has churches for Roman Catholics, Lutherans, and Calvinists. It is seated on the Erlbach, forty-six miles west of Manheim, fifty south-west of Mentz, and forty-nine north by west of Strasburgh. Long. 7° 26′ E., lat. 49° 16′ N.

Deux Ponts, Les, a town of the Bavarian States, the capital of the foregoing district, is situated on the right bank of the Little Erlbach, and has a castle, formerly the ducal residence. The chief objects of interest are a beautiful organ in the town church, the new Lutheran church and academy, and the orphan-house. In 1709 Stanislaus Leczynsky, king of Poland, took up his residence here, and built the palace of Schuhflick, about half a mile from the town. The town is distinguished for its valuable editions of the Greek and Latin classics. Population 5000. It is forty-six miles west of Manheim, and fifty-eight east of Mentz.

DEW, *n. s.*
Dew'berry, *n. s.*
Dewbesprent', *part.*
Dew'burning, *adj.*
Dew'drop, *n. s*
Dew'lap,
Dew'lapt, *adj.*
Dew'worm, *n. s.*
Dew'y, *adj.*

Goth. *doggwa*; Swe. *dæfwa*; Belg. *dauw*; Teut. *tau*, from Gr. δευω, to moisten. The condensed moisture of the atmosphere. See the scientific article. Dew-berry is a fruit. Dew-lap, the flesh of the throat of oxen that laps the dew. The meaning of the other compounds is obvious. Dew is often used figuratively for bounty and love, as in the instance from Shakspeare.

> At last the golden orientale gate
> Of greatest heaven gan to open fayre,
> And Phœbus fresh, as brydegroome to his mate
> Came dauncing forth, shaking his *deawie* hayre.
>
> *Spenser. Faerie Queene.*

> A trickling stream of balm most sovereign
> And dainty dear, which on the ground still fell,
> And overflowed all the fertile plain,
> As it had *dewed* been with timely rain. *Id.*

> He, now to prove his late renewed might,
> High brandishing his bright *dew-burning* blade,
> Upon his crested scalp so sore did smite,
> That to the scull a yawning wound it made. *Id.*

> With him pour we in our country's purge
> Each drop of us.
> —— Or so much as it needs
> To *dew* the sovereign flower, and drown the weeds.
>
> *Shakspeare.*

> Never yet one hour in bed
> Did I enjoy the golden *dew* of sleep,
> But with his tim'rous dreams was still awakad.
>
> *Id.*

Feed him with apricocks and *dewberries*,
With purple grapes, green figs, and mulberries.
Id.

I must go seek some *dewdrops* here,
And hang a pearl in every cowslip's ear. *Id.*

And sometimes lurk I in a gossip's bowl,
In very likeness of a roasted crab;
And when she drinks against her lips I bob,
And on the withered *dewlap* pour the ale. *Id.*

Who would believe that there were mountaineers
Dewlapt like bulls, whose throats had hanging at 'em
Wallets of flesh? *Id.*

That Churchman bears a bounteous mind, indeed;
A hand as fruitful as the land that feeds us;
His *dew* falls every where. *Id.*

Dews and rain are but the returns of moist vapours condensed. *Bacon.*

An host
Innumerable as the stars of night,
Or stars of morning, *dewdrops*, which the sun
Impearls on every leaf, and every flower. *Milton.*

From the earth a *dewy* mist
Went up, and watered all the ground, and each
Plant of the field. *Id.*

He ceased; discerning Adam with such joy
Surcharged, as had, like grief, been *dewed* in tears,
Without the vent of words, which these he breathed.
Id.

This evening late, by then the chewing flocks
Had ta'en their supper on the savoury herb
Of knot-grass *dewbesprent*, and were in fold,
I sat me down to watch upon a bank
With ivy canopied, and interwove
With flaunting honey-suckle. *Id.*

Dewberries, as they stand here among the more delicate fruits, must be understood to mean raspberries, which are also of the bramble kind. *Hanmer.*

For the trout, the *dew-worm*, which some call the lob worm, and the braudling, are the chief. *Walton.*

Palemon above the rest appears
In sable garments, *dewed* with gushing tears.
Dryden.

Where two adverse winds,
Sublimed from *dewy* vapours in mid sky,
Engage with horrid shock, the ruffled brine
Roars stormy. *Philips.*

In Gallic blood again
He *dews* his reeking sword, and strows the ground
With beardless ranks. *Id.*

Large rowles of fat about his shoulder slung,
And from his neck the double *dewlap* hung.
Addison.

The *dewlapt* bull now chases along the plain,
While burning love ferments in every vein. *Gay.*

Rest, sweet as *dewdrops* on the flowery lawns,
When the sky opens, and the morning dawns.
Tickell.

Now sliding streams the thirsty plants renew,
And feed their fibres with reviving *dew*. *Pope.*

No more the morn, with tepid rays,
Unfolds the flower of various hue,
Noon spreads no more the genial blaze,
Nor gentle eve distils the *dew*.
Johnson. Ode to Winter.

The spring is come; the violet's gone,
The first-born child of the early sun;
With us she is but a winter's flower,
The snow on the hills cannot blast her bower,
And she lifts up her *dewy* eye of blue
To the youngest sky of the self-same hue.
Byron.

Dew is defined by Dr. Hutton 'a thin light insensible mist, or rain, ascending with a slow motion, and falling while the sun is below the horizon.' He adds, 'that it appears to differ from rain, as less from more' Its origin and matter are doubtless from the vapors and exhalations that rise from the earth and water. See Exhalation.

As it appears only during clear nights, when the heavens seem to glow with constellations, the ancients finely imagined it to be actually shed from the stars, and therefore to partake of a pure and celestial essence. 'Hence,' says Mr. Leslie, 'the vulgar notion that dew falls, which has prevailed through all ages, and continues to tincture every language.' 'Plutarch asserts it to be most abundant in the time of full moon. The lunar beams themselves were supposed to contribute some influence, being of a cold nature, and therefore possessed of a humifying quality. The moon, it was imagined, performed merely the office of an imperfect mirror, reflecting the softened lustre of the sun without any portion of his heat.' Certain abstergent qualities were at the same period ascribed to dew. Ammianus Marcellinus says that the health of mountaineers is principally owing to their constant exposure to bracing dews.

It was long disputed whether the dew is formed from the vapors ascending from the earth during the night time, or from the descent of such as have been already raised through the day. M. Huet shows that dew does not fall but rises. Some of the most remarkable experiments in support of this hypothesis are those of Mr. Du Fay of the (Royal) Academy of Sciences at Paris. He supposed, that if the dew ascended, it must wet a body placed low down sooner than one placed on a higher situation; and if a number of bodies were placed in this manner the lowermost would be wetted first, and the rest in like manner, gradually up to the top. To determine this, he placed two ladders against one another, meeting at their tops, spreading wide asunder at the bottom, and so tall as to reach thirty-two feet high. To the several steps of these he fastened large squares of glass like the panes of windows, placing them in such a manner that they should not overshade one another. On the trial it appeared exactly as Mr. Du Fay had apprehended. The lower surface of the first piece of glass was first wetted, then the upper, then the lower surface of the pane next above it; and so on, till all the pieces were wetted to the top. Hence it appeared plain to him, that the dews consisted of the vapors ascending from the earth during the night; which, being condensed by the coldness of the atmosphere, are prevented from being dissipated as in the day-time by the sun's heat. He afterwards tried a similar experiment with pieces of cloth instead of panes of glass, and the result was quite conformable to his expectations. He weighed all the pieces of cloth next morning, to know what quantity of water each had imbibed, and found those that had been placed lowermost considerably heavier than such as had been placed at the top; though he owns that this experiment did not succeed so perfectly as the former. M. Muschenbroeck, who embraced the contrary opinion, thought he had

invalidated all Mr. Du Fay's proofs, by repeating his experiments with the same success, on a plane covered with sheet lead. But to this M. Du Fay replied, that there was no occasion for supposing the vapor to rise through the lead, nor from that very spot; but that, as it arose from the adjoining open ground, the continual fluctuation of the air could not but spread it abroad, and carry it thither in its ascent. This experiment of M. Muschenbroeck's was not considered sufficient to overthrow those of M. Du Fay. Yet one thing seemed to favor the hypothesis of its descent, i. e. that in cloudy weather there is little or no dew to be observed. And Muschenbroeck, continuing his experiments, made the interesting discovery that dew forms in very different proportions on different bodies, for that it will scarcely adhere to a polished metal surface, while it abounds on glass or porcelain. The color of the substance appeared also, he found, to alter the effects. A piece of red leather acquired, by exposure through the night, twice as much dew as another black or blue piece of the same size. He was afterwards, however, led to attribute this latter circumstance to the coloring matter of the morocco leather used.

M. Du Fay also continued his experiments: and the result was, that on neither side of this controversy was there a sufficient preponderance of proof to decide the question; but the old doctrine of Aristotle on the subject was revived, viz. that dew separates, under certain circumstances, from the air, and becomes attracted to particular bodies; or that the moisture, in which it directly originates, is suspended in the atmosphere by a perfectly chemical process, similar to that by which salts are dissolved in water, heat in both cases being found to increase the solvent power.

Professor Leslie's attention was first drawn to the subject as early as the year 1798. By means of his hygrometer he then established the curious fact, that the moisture of air is deposited on glass before it actually reaches the point of saturation. He thus explains, in his valuable Treatise on the Relations of Air to Heat and Moisture, the general result of his investigations at this and a subsequent period:—'In fine calm weather, after the rays of the declining sun have ceased to warm the surface of the ground, the descent of the higher mass of air gradually chills the undermost stratum, and disposes it to dampness, till their continued intermixture produces a fog, or low cloud. Such fogs are, towards the evening, often observed gathering in narrow vales, or along the course of sluggish rivers, and generally hovering within a few inches of the surface. But in all situations, these watery deposits, either to a greater or a less degree, occur in the same disposition of the atmosphere. The minute suspended globules, attaching themselves to the projecting points of the herbage, form dew in mild weather, or shoot into hoar-frost when cold predominates. They collect most readily on glass, but seem to be repelled by a bright surface of metal.' In clear and calm weather, the air is always drier near the surface during the day than at a certain height above the ground, but it becomes damper on the approach of evening, while, at some elevation, it retains a moderate degree of dryness through the whole of the night. If the sky be clouded, less alteration is betrayed in the state of the air, both during the progress of the day, and at different distances from the ground; and, if wind prevail, the lower strata of the atmosphere, thus agitated and intermingled, will be reduced to a still nearer equality of condition.' (pp. 92 and 192).

Some interesting experiments were now made in France, in regard to the tendency M. du Fay had observed in different bodies, to imbibe dew in different proportions. It had long been seen that dew is deposited on glass, when metals in its neighbourhood remain dry; M. Prévost of Montaubon however discovered some new and curious facts relative to this deposition. When thin plates of metal are fixed on pieces of glass, it sometimes happens that they are as much covered with dew as the glass itself: but more frequently they remain dry; and in this case they are also surrounded by a dry zone. But when the other side of the glass is exposed to dew, the part which is opposite to the metal remains perfectly dry. If the metal be again covered with glass, it will lose its effect in preventing the deposition.

These experiments may be conveniently confirmed on the glass of a window, when moisture is attaching itself to either of its surfaces. Mr. Prévost remarks that it often happens that dew is deposited externally, even when the air within is warmer than without. A plate of metal fixed internally on the window receives a larger quantity of moisture than the glass, while the space opposite to an external plate remains dry: and, if the humidity is deposited from without, the place opposite the internal plate is also more moistened, while the external plate remains dry: and both these circumstances may happen at once with the same result. A small plate fixed externally, opposite to the middle of the internal plate, protects this part of the plate from receiving moisture; and a smaller piece of glass, fixed on the external plate, produces again a central spot of moisture on the internal one: and the same changes may be continued for a number of alternations, until the whole thickness becomes more than half an inch. Gilt paper, with its metallic surface exposed, acts as a metal; but when the paper only is exposed it has no effect. When a plate of metal, on which moisture would have been deposited, is fixed at a small distance from the glass, the moisture is transferred to the surface of the glass immediately under it without affecting the metal: if this plate is varnished on the surface remote from the glass, the effect remains; but if on the side next the glass, it is destroyed. The oxidation of metals renders them also unfit for the experiment. When glasses partly filled with mercury, or even with water, are exposed to the dew, it is deposited only on the parts which are above the surface of the fluid. But in all cases when the humidity is too copious the results are confused. In order to reduce these facts to some general laws, M. Prévost observes, that when the metal is placed on the warmer side of the glass, the humidity is deposited more copiously either on itself or on either surface of the glass in its neighbourhood: but that, when it is on the colder side, it neither receives humidity, nor permits its deposition on

the glass: that a coat of glass, or varnish, destroys the efficacy of the metal, but that an additional plate of metal restores it.

M. Prévost was at first disposed to attribute these phenomena to the effects of electricity, but he thinks it possible to explain them all by the action of heat only; for this purpose he assumes, first, that glass attracts humidity the more powerfully as its temperature is lower; secondly, that metals attract it but very little; thirdly, that glass exerts this attraction, notwithstanding the interposition of other bodies; and, fourthly, that metals give to glass, placed in their neighbourhood, the power of being heated by warm air, and being cooled by cold air, with greater rapidity. Hence, that the temperature of the glass approaches more nearly to that of the air on the side opposite to the metal, and attracts the humidity accordingly, more or less, either to its own surface, or to that of the metal. We should, indeed, have expected a contrary effect; that the metal would rather have tended to communicate to the glass the temperature of the air on its own side; but, granting that the assumptions of M. Prévost serve to generalise the facts with accuracy, their temporary utility is as great as if they were fundamentally probable.

Dr. Wells, however, has traced up the phenomena of dew to their legitimate sources. 'Very little,' he observes, with Aristotle, 'is deposited, except on calm and clear nights, or when the clouds are high. It is never seen on nights both cloudy and windy; and if, in the course of the night, the weather, from being serene, should become dark and stormy, dew, which had been deposited, will disappear. In calm weather, if the sky be partially covered with clouds, more dew will appear than if it were entirely uncovered.'

Dew probably begins in the country to appear upon grass, in places shaded from the sun, during clear and calm weather, soon after the heat of the atmosphere has declined, and continues to be deposited through the whole night, and for a little after sun-rise. Its quantity will depend, in some measure, on the proportion of moisture in the atmosphere, and is, consequently, greater after rain than after a long tract of dry weather; and in Europe, with southerly and westerly winds, than with those which blow from the north and the east. The direction of the sea determines this relation of the winds to dew. For in Egypt, dew is scarcely ever observed, except while the northerly or Etesian winds prevail. Hence, also, dew is generally more abundant in spring and autumn, than in summer. And it is always very copious on those clear nights which are followed by misty mornings, which show the air to be loaded with moisture. And a clear morning, following a cloudy night, determines a plentiful deposition of the retained vapor. When warmth of atmosphere is compatible with clearness, as is the case in southern latitudes, though seldom in our country, the dew becomes much more copious, because the air then contains more moisture. Dew continues to form with great copiousness, as the night advances, from the increased refrigeration of the ground.

Dew, according to Aristotle, is a species of rain, formed in the lower atmosphere, in consequence of its moisture being condensed, by the cold of the night, into minute drops. Opinions of this kind, says Dr. Wells, are still entertained by many persons, among whom is the very ingenious professor, Leslie. (Relations of Heat and Moisture, pp. 37 and 132). A fact, however, first taken notice of by Gerstin, who published his Treatise on Dew in 1773, proves them to be erroneous; for he found that bodies a little elevated in the air, often become moist with dew, while similar bodies, lying on the ground, remain dry, though necessarily, from their position, as liable to be wetted, by whatever falls from the heavens, as the former. The above notion is perfectly refuted by what will presently appear relative to metallic surfaces exposed to the air in a horizontal position, which remain dry, while every thing around them is covered with dew.

After a long period of drought, when the air was very still and the sky serene, Dr. Wells exposed to the sky, twenty-eight minutes before sun-set, previously weighed parcels of wool and swandown, upon a smooth, unpainted, and perfectly dry fir-table, five feet long, three broad, and nearly three in height, which had been placed, an hour before, in the sunshine, in a large level grass-field. The wool, twelve minutes after sun-set, was found to be 14° colder than the air, and to have acquired no weight. The swandown, the quantity of which was much greater than that of the wool, was, at the same time, 13° colder than the air, and was also without any additional weight. In twenty minutes more, the swandown was 14° 30′ colder than the neighbouring air, and was still without any increase of its weight. At the same time the grass was 15° colder than the air four feet above the ground.

Dr. Wells, by a copious induction of facts, derived from observation and experiment, establishes the proposition, that bodies become colder than the neighbouring air before they are dewed. The cold, therefore, which Dr. Wilson and Mr. Six conjectured to be the effect of dew, now appears to be its cause. But what makes the terrestrial surface colder than the atmosphere? The radiation or projection of heat into free space. Now the researches of professor Leslie and count Rumford have demonstrated, that different bodies project heat with very different degrees of force.

In the operation of this principle, therefore, conjoined with the power of a concave mirror of cloud, or any other awning, to reflect, or throw down again those calorific emanations which would be dissipated in a clear sky, we shall find a solution of the most mysterious phenomena of dew. Two circumstances must here be considered:—

I. The exposure of the particular surface to be dewed, to the free aspect of the sky.

II. The peculiar radiating power of the surface. 1. Whatever diminishes the view of the sky, as seen from the exposed body, obstructs the depression of its temperature, and occasions the quantity of dew formed upon it, to be less than would have occurred, if the exposure to the sky had been complete.

Dr. Wells bent a sheet of pasteboard into the shape of a pent-house, making the angle of flexure 90°, and leaving both ends open. This was placed one evening, with its ridge uppermost, upon a grass-plat, in the direction of the wind, as well as this could be ascertained. He then laid ten grains of white, and moderately fine wool, not artificially dried, on the middle part of that spot of the grass which was sheltered by the roof, and the same quantity on another part of the grass-plat, fully exposed to the sky. In the morning, the sheltered wool was found to have increased in weight only two grains, but that which had been exposed to the sky, sixteen grains. He varied the experiment on the same night, by placing, upright, on the grass-plat, a hollow cylinder of baked clay, one foot diameter, and two feet and a-half high. On the grass round the outer edge of the cylinder, were laid ten grains of wool, which, in this situation, as there was not the least wind, would have received as much rain as a like quantity of wool fully exposed to the sky. But the quantity of moisture acquired by the wool partially screened by the cylinder from the aspect of the sky, was only about two grains, while that acquired by the same quantity, fully exposed, was sixteen grains. Repose of a body seems necessary to its acquiring its utmost coolness, and a full deposit of dew. Gravel-walks and pavements project heat, and acquire dew, less readily than a grassy surface. Hence, wool placed on the former, has its temperature less depressed than on the latter, and, therefore, is less bedewed. Nor does the wool here attract moisture by capillary action on the grass, for the same effect happens if it be placed in a saucer. Nor is it by hydrometric attraction; for, in a cloudy night, wool placed on an elevated board acquired scarcely any increase of weight.

If wool be insulated a few feet from the ground, on a bad conductor of heat, as a board, it will become still colder than when in contact with the earth, and acquire fully more dew than on the grass. At the windward end of the board it is less bedewed than at the sheltered end, because, in the former case, its temperature is nearer to that of the atmosphere. Rough and porous surfaces, as shavings of wood, take more dew than smooth and solid wood; and raw silk and fine cotton are more powerful in this respect than even wool. Glass projects heat rapidly, and is as rapidly coated with dew. But bright metals attract dew much less powerfully than other bodies. If we coat a piece of glass, partially, with bright tin-foil, or silver leaf, the uncovered portion of the glass quickly becomes cold by radiation, on exposure to a clear nocturnal sky, and acquires moisture; which, beginning on those parts most remote from the metal, gradually approaches it. Thus, also, if we coat outwardly a portion of a window-pane with tin-foil, in a clear night, then moisture will be deposited inside, on every part except opposite to the metal. But if the metal be inside, then the glass under and beyond it will be sooner, or most copiously bedewed. In the first case, the tin-foil prevents the glass under it from dissipating its heat, and, therefore, it can receive no dew; in the second case, the tin-foil prevents the glass, which it coats, from receiving the calorific influence of the apartment, and hence it is sooner refrigerated by external radiation than the rest of the pane. Gold, silver, copper, and tin, bad radiators of heat and excellent conductors, acquire dew with greater difficulty than platina, which is a more imperfect conductor; or than lead, zinc, and steel, which are better radiators. Hence, dew which has formed upon a metal will often disappear, while other substances in the neighbourhood remain wet; and a metal, purposely moistened, will become dry, while neighbouring bodies are acquiring moisture. This repulsion of dew is communicated by metals to bodies in contact with or near them. Wool laid on metal acquires less dew than wool laid on the contiguous grass.

If the night becomes cloudy, after having been very clear, though there be no change with respect to calmness, a considerable alteration in the temperature of the grass always ensues. Upon one such night, the grass, after having been 12° colder than the air, became only 2° colder; the atmospheric temperature being the same at both observations. On a second night, the grass became 9° warmer in the space of an hour and a half. On a third night, in less than forty-five minutes, the temperature of the grass rose 15°, while that of the neighbouring air increased only 3½°. During a fourth night, the temperature of the grass, at half past nine o'clock, was 32°. In twenty minutes afterwards, it was found to be 39°, the sky in the mean time having become cloudy. At the end of twenty minutes more, the sky being clear, the temperature of the grass was again 32°. A thermometer lying on a grass-plat will sometimes rise several degrees, when a cloud comes to occupy the zenith of a clear sky.

When, during a clear and still night, different thermometers, placed in different situations, were examined at the same time, those which were situated where most dew was formed, were always found to be the lowest. On dewy nights the temperature of the earth, half an inch or an inch beneath the surface, is always found much warmer than the grass upon it, or the air above it. The differences on five such nights, were from 12° to 16°.

In making experiments with thermometers, it is necessary to coat their bulbs with silver or gold leaf, otherwise the glassy surface indicates a lower temperature than that of the air, or the metallic plate it touches. Swandown seems to exhibit greater cold, on exposure to the aspect of a clear sky, than any thing else. When grass is 14° below the atmospheric temperature, swandown is commonly 15°. Fresh unbroken straw and shreds of paper, rank in this respect with swandown. Charcoal, lamp-black, and rust of iron, are also very productive of cold. Snow stands 4° or 5° higher than swandown laid upon it in a clear night.

The following tabular view of observations by Dr. Wells, is peculiarly instructive:—

	6h. 45′	7h.	7h. 20′	7h. 40′	8h. 45′
Heat of the air four feet above the grass,	60½°	60¾°	59°	53°	54°
—— wool on a raised board,	53½	54½	51½	48½	44½
—— swandown on the same,	54½	53	51	47½	42½
—— surface of the raised board,	58	57	55½	—	—
—— grass-plat,	53	51	49½	49	42

The temperature always falls in clear nights; but the deposition of dew, depending on the moisture of the air, may occur or not. Now, if cold were the effect of dew, the cold connected with dew ought to be always proportional to the quantity of that fluid; but this is contradicted by experience. On the other hand, if it be granted that dew is water precipitated from the atmosphere by the cold of the body on which it appears, the same degree of cold in the precipitating body may be attended with much, with little, or with no dew, according to the existing state of the air in regard to moisture; all of which circumstances are found really to take place. The actual precipitation of dew, indeed, ought to evolve heat.

A very few degrees of difference of temperature between the grass and the atmosphere are sufficient to determine the formation of dew, when the air is in a proper state. But a difference of even 30°, or more, sometimes exists, by the radiation of heat from the earth to the heavens. And hence, the air near the refrigerated surface must be colder than that somewhat elevated. Agreeably to Mr. Six's observations, the atmosphere, at the height of 220 feet, is often, upon such nights, 10° warmer than what it is seven feet above the ground. And had not the lower air thus imparted some of its heat to the surface, the latter would have been probably 40° under the temperature of the air.

Insulated bodies, or prominent points, are sooner covered with hoar-frost and dew than others; because the equilibrium of their temperature is more difficult to be restored. As aerial stillness is necessary to the cooling effect of radiation, we can understand why the hurtful effects of cold, heavy fogs, and dews, occur chiefly in hollow and confined places, and less frequently on hills. In like manner, the leaves of trees often remain dry throughout the night, while the blades of grass are covered with dew.

No direct experiments can be made to ascertain the manner in which clouds prevent or lessen the appearance of a cold at night, upon the surface of the earth, greater than that of the atmosphere. But it may be concluded from the preceding observations, that they produce this effect almost entirely by radiating heat to the earth, in return for that which they intercept in its progress from the earth towards the heavens. The heat extricated by the condensation of transparent vapor into cloud must soon be dissipated; whereas, the effect of greatly lessening, or preventing altogether, the appearance of a greater cold on the earth than that of the air, will be produced by a cloudy sky during the whole of a long night.

We can thus explain, in a more satisfactory manner than has usually been done, the sudden warmth that is felt in winter, when a fleece of clouds supervenes in clear frosty weather. Chemists ascribed this sudden and powerful change to the disengagement of the latent heat of the condensed vapors; but Dr. Wells's thermometric observations on the sudden alternations of temperature by cloud and clearness, render that opinion untenable. We find the atmosphere itself, indeed, at moderate elevations, of pretty uniform temperature, while bodies at the surface of the ground suffer great variations in their temperature. This single fact is fatal to the hypothesis derived from the doctrines of latent heat.

'I had often,' says Dr. Wells, 'smiled, in the pride of half knowledge, at the means frequently employed by gardeners to protect tender plants from cold, as it appeared to me impossible that a thin mat, or any such flimsy substance, could prevent them from attaining the temperature of the atmosphere, by which alone I thought them liable to be injured. But when I had learned that bodies on the surface of the earth become, during a still and serene night, colder than the atmosphere, by radiating their heat to the heavens, I perceived immediately a just reason for the practice which I had before deemed useless. Being desirous, however, of acquiring some precise information on this subject, I fixed perpendicularly, in the earth of a grass-plat, four small sticks, and over their upper extremities, which were six inches above the grass, and formed the corners of a square whose sides were two feet long, I drew tightly a very thin cambric handkerchief. In this disposition of things, therefore, nothing existed to prevent the free passage of air from the exposed grass to that which was sheltered, except the four small sticks, and there was no substance to radiate downwards to the latter grass, except the cambric handkerchief.'

The sheltered grass, however, was found nearly of the same temperature as the air, while the unsheltered was 5° or more colder. One night the fully exposed grass was 11° colder than the air; but the sheltered grass was only 3° colder. Hence we see the power of a very slight awning to avert or lessen the injurious coldness of the ground. To have the full advantage of such protection from the chill aspect of the sky, the covering should not touch the subjacent bodies. Garden walls act partly on the same principle. Snow screens plants from this chilling radiation. In warm climates, the deposition of dewy moisture on animal substances hastens their putrefaction. As this is apt to happen only in clear nights, it was anciently supposed that bright moonshine favored animal corruption.

From this rapid emission of heat from the surface of the ground, we can now explain the formation of ice during the night in Bengal, while the temperature of the air is above 32°. The

nights most favorable for this effect, are those which are the calmest and most serene, and on which the air is so dry as to deposit little dew after midnight. Clouds and frequent changes of wind are certain preventives of congelation. 300 persons are employed in this operation at one place. The enclosures formed on the ground are four or five feet wide, and have walls only four inches high. In these enclosures, previously bedded with dry straw, broad, shallow, unglazed earthen pans are set, containing unboiled pump-water. Wind, which so greatly promotes evaporation, prevents the freezing altogether, and dew forms in a greater or less degree during the whole of the nights most productive of ice. If evaporation were concerned in the congelation, wetting the straw would promote it. But Mr. Williams, in the 83d vol. of the Philosophical Transactions, says, that it is necessary to the success of the process that the straw be dry. In proof of this he mentions, that when the straw becomes wet by accident it is renewed; and that when he purposely wetted it in some of the enclosures, the formation of ice there was always prevented. Moist straw both conducts heat and raises vapor from the ground, so as to obstruct the congelation. According to Mr. Leslie, water stands at the head of radiating substances.

DEWARCUNDAH, a sterile, or rather a desolated district of Hindostan, province of Golconda, extending along the south side of the river Godavery, and situated between the eighteenth and nineteenth degrees of northern latitude. The country contains the ruins of a number of forts and villages, which evince it to have been formerly well cultivated.

Dew-Born, in country affairs, a distemper in cattle, being a swelling in the body, as much as the skin can hold, so that some beasts are in danger of bursting. It proceeds from greediness in feeding, when put into a rank pasture; but commonly when the grass is full of water. In this case the beast should be exercised, and made to purge well; but the proper cure is bleeding in the tail; then take a grated nutmeg, with an egg, and breaking the top of the shell, put out so much of the white as that you may have room to slip the nutmeg into the shell; mix them together, and then let shell and all be put down the beast's throat; that done, walk him up and down, and he will soon mend.

De Witt (John), a celebrated Dutch statesman, born in 1625, at Dort. At the age of twenty-three, he published Elementa Curvarum Linearum; and, after taking his degrees, became, in 1650, pensionary of Dort, and distinguished himself very early in the management of public affairs. He opposed the war with the English as injurious to the States; and when the event justified his predictions, he was unanimously chosen pensionary of Holland. In this capacity he labored to procure a peace with Cromwell; in which peace a secret article was introduced for the exclusion of the House of Orange. In the war with England, after the Restoration, when it was thought expedient, on Opdam's defeat and death, that some of their own deputies should command the fleet, he was one of the three in commission, and wrote an accurate relation of all that happened during the expedition; for which, at his return, he received the solemn thanks of the States-General. In 1667 he established the perpetual edict for abolishing the office of Stadtholder, which produced seditions and tumults; on which the pensionary begged dismission from his post: this was granted, with thanks for his services. But the invasion of the French, and the internal division among the Hollanders, spread every where terror and confusion. Cornelius, the pensionary's brother, was imprisoned, and condemned to exile; and a report being raised that he would be rescued, the mob armed, and surrounded the prison where the two brothers were together, dragged them out, barbarously murdered them, hung the bodies on the gallows, and cut them to pieces. Such was the end of John De Witt, a man whose life had been devoted to the service of his country, without any consideration of his own emolument. Besides the work already mentioned, he wrote a book on the maxims of government, a translation of which, entitled, The true Interest and Political Maxims of the Republic of Holland, has been printed in London.

De Witt's Land, part of the north-west coast of New Holland, discovered by a Dutch navigator of that name, in 1628. It is supposed to comprehend about ten degrees of latitude, and fifteen of longitude. Many low and sterile islands, were afterwards discovered along the coast, by the French.

Dex'ter, *adj.*
Dex'tral, *adj.*
Dextra'lity, *n. s.*
Dexter'ity, *n. s.*
Dex'terous, *adj.*
Dex'terously, *adv.*

From Lat. *dexter*, the right hand. Gr. δεξιτερος, from δεχομαι, to receive, because we generally receive things with the right hand. The right, not the left; a term in heraldry. Dextral is a synonymous general term. Dextrality, the state of being on the right hand side. Dexterous is, clever; expert; because the right hand is generally more so than the left.

My mother's blood
Runs on the *dexter* cheek, and this sinister
Bounds in my sire's. *Shakspeare.*

His wisdom, by often evading from perils, was turned rather into a *dexterity* to deliver himself from dangers, when they pressed him, than into a providence to prevent and remove them afar off. *Bacon.*

In business *dexterous*, weighty in debate. *Johnson.*

As for any tunicles or skins, which should hinder the liver from enabling the *dextral* parts, we must not conceive it diffuseth its virtue by mere irradiation, but by its veins and proper vessels.
Browne's Vulgar Errours.

If there were a determinate prepotency in the right, and such as ariseth from a constant root in nature, we might expect the same in other animals, whose parts are also differenced by *dextrality*. *Id.*

They attempted to be knaves, but wanted art and *dexterity*. *South.*

But then my study was to cog the dice,
And *dext'rously* to throw the lucky sice. *Dryden.*

They confine themselves, and are *dexterous* managers enough of the wares and products of that corner with which they content themselves. *Locke.*

For both their *dexterous* hands the lance could wield. *Pope.*

The measures, for instance, in which your Grace's activity has been chiefly exerted, as they were adopted without skill, should have been conducted with more than common *dexterity*. *Junius.*

DEXTER, in heraldry, an appellation given to whatever belongs to the right side of a shield or coat of arms: thus we say, bend dexter, dexter point, &c.

DEY, the title of the sovereign of Algiers, under the protection of the grand signior. A prince, under this title, was appointed by the sultan, at the request of the Turkish soldiers, in 1710. The term dey, in the Turkish language, signifies an uncle by the mother's side. The reason of the denomination is this: the Turkish military consider the grand seignior as their father; the state as their mother, by which they are nourished and maintained; and the dey as the brother of the state, and consequently the uncle of all who are under his dominion. See ALGIERS.

DIABETES, *n. s.* Διαβαιτης. A morbid copiousness of urine; a fatal colliquation by the urinary passages.

An increase of that secretion may accompany the general colliquations; as in fluxes, hectic sweats and coughs, *diabetes*, and other consumptions.
Derham's Physico-Theology.

A theory of the *diabetes* and dropsy, produced by drinking fermented or spirituous liquors, is explained in a treatise on the inverted motions of the lymphatic system. *Darwin.*

DIABETES, from δια, through, and βαινω, to pass. An immoderate flow of urine. A genus of disease in the class neuroses, order spasmi of Cullen. There are two species of this complaint: Diabetes insipidus, in which there is a superabundant discharge of limpid urine, of its usual urinary taste; and diabetes mellitus, in which the urine is very sweet, and contains a great quantity of sugar.

DIABOL'ICAL, *adj.* } From Lat. *diabolus.*
DIABOL'ICK. } See DEVIL. Devilish; partaking of the qualities of the devil; impious; atrocious.

This, in other beasts observed,
Doubt might beget of *diabolick* power,
Active within, beyond the sense of brute.
Milton.

The practice of lying is a *diabolical* exercise, and they that use it are the devil's children. *Ray.*

They are beautiful, and cannot, sure, be demons?
STRANGER. True;
The Devil's always ugly; and your beauty
Is never *diabolical*. *Byron.*

DIACH'YLON, in pharmacy, an emollient digestive plaster composed of mucilages or viscid juices drawn from certain plants. See PHARMACY.

DIACO'DIUM, *n. s.* Διακωδιον. The syrup of poppies.

DIACO'USTICS, *n. s.* Διακουστικα. The doctrine of sounds.

DIACRII, in antiquity, the name of a faction at Athens. That city was divided into two parties: the one desired an oligarchy, and would only have a few persons employed in the government: the others were for a democratical government, wherein the whole people should have a share. The first were called diacrii, and the latter pediaci; the latter inhabiting the lower, and the former the ακρον, or upper part of the city.—The laws of Solon imported, that Pisistratus should be chief of the diacrii; though the scholiast on Aristophanes's comedy of The Wasps, affirms that Pandion distributed the quarter of the diacrii among his sons, and put Lycus at their head.

DIADELPHIA, from δις twice, and αδελφος a brother, the seventeenth class in the sexual system, comprehending those plants which bear hermaphrodite flowers with two sets of united stamina; but this circumstance must not be absolutely depended on. They are the papilionacei of Tournefort, the irregulares tetrapetali of Rivinus, and the leguminosa of Ray. See BOTANY.

DI'ADEM, *n. s.* } Fr. *diadéme;* Span. and
DI'ADEMED, *adj.* } Lat. *diadema;* Gr. διαδημα, from δια and δεω, to bind. The fillet, tiara, or crown of monarchs. See CROWN. Diademed is crowned.

And the ighen of him weren a flawme of fier, and in his heed manye *diademys*. *Wiclif. Apoc.* xix.

Thou shalt be a crown of glory in the hand of the Lord, and a royal *diadem* in the hand of thy God.
Isaiah lxii. 3.

The sacred *diadem* in pieces rent,
And purple robe gored with many a wound.
Spenser.

Methought I sat in seat of majesty,
In the cathedral church of Westminster,
And in that chair where kings and queens are crowned,
Where Henry and Dame Margaret kneeled to me,
And on my head did set the *diadem*. *Shakspeare.*

A crown,
Golden in show, is but a wreath of thorns;
Brings dangers, troubles, cares, and sleepless nights,
To him who wears the regal *diadem*. *Milton.*

A list the coblers' temples ties,
To keep the hair out of their eyes;
From whence 'tis plain the *diadem*,
That princes wear, derives from them. *Swift.*

Not so, when *diademed* with rays divine,
Touched with the flame that breaks from virtue's shrine,
Her priestless muse forbids the good to die,
And opes the temple of eternity. *Pope.*

What is the exaltation of the meanest beggar from a dunghill to an earthly *diadem*, when compared with that of human nature from the grave to the throne of God. *Bp. Horne, Psal.* cxiii. 7.

And she, proud Austria's mournful flower,
Thy still imperial bride;
If still she loves thee hoard that gem,
'Tis worth thy vanished *diadem*.
Byron. Ode to Napoleon.

DIADEM, in antiquity, a head-band or fillet, worn by kings as a badge of their royalty. It was made of silk, thread, or wool, and tied round the temples and forehead, the ends being tied behind, and let fall on the neck. It was usually white and plain, though sometimes embroidered with gold, and set with pearls and precious stones. In latter times it came to be twisted round crowns, laurels, &c., and even appears to have been worn on divers parts of the

body. The word is derived from the Greek, as mentioned in the preceding article.

DIADEM, in heraldry, is applied to circles or rims serving to inclose the crowns of sovereign princes, and to bear the globe and cross, or the fleurs-de-lis for their crest. The crowns of sovereigns are bound, some with a greater, and some with a less number of diadems. The bandage about the heads of Moors on shields is also called diadem, in blazoning.

DI'ADROM, *n. s.* Διαδρομεω. The time in which any particular motion is performed.

A gry is one tenth of a line, a line one tenth of an inch, an inch one tenth of a philosophical foot, a philosophical foot one third of a pendulum; whose *diadroms*, in the latitude of forty-five degrees, are each equal to one second of time, or a sixtieth of a minute. *Locke.*

DIÆ'RESIS, *n. s.* Διαιρεσις. The separation or disjunction of syllables, as aër.

Diæresis is also a kind of metaplasm, or addition to a word, by dividing one syllable into two; as aulae, by a *diæresis*, is a word of three syllables, instead of aulæ. *Dr. A. Rees.*

DIÆRESIS, in medicine, is the consuming of the vessels of an animal body, when, from some corroding cause, certain passages are made which naturally ought not to have been, or certain natural passages are dilated beyond their ordinary dimensions, so that the humors which ought to have been contained in the vessels extravasate or run out.

DIÆRESIS, in surgery, an operation serving to divide and separate the part when the continuity is a hindrance to the cure.

DIÆTETÆ, in Grecian antiquity, a kind of judges, of which there were two sorts; viz. Diætetæ cleroti, public arbitrators, chosen by lot to determine all causes exceeding ten drachms, within their own tribe; and from their sentence an appeal lay to the superior courts. And diætetæ diallecterii, private arbritators from whose sentence there lay no appeal. They always took an oath to administer justice without partiality.

DIAGLYPHICA, the art of cutting or engraving figures on metals, such as seals, intaglios, matrices of letters, &c., or coins for metals. See ENGRAVING.

DIAGNO'STICK, *n. s.* Διαγινωσκω. A symptom by which a disease is distinguished. Used also figuratively.

One of our physicians proved disappointed of his prognosticks, or rather *diagnosticks*. *Harvey on Consumptions*

DIAG'ONAL, *adj.* & *n. s.* } Fr. *diagonal*,
DIAG'ONALLY, *adv.* } from Gr. διαγωνιος, δια and γωνια, an angle. A line drawn from one angle of a square to another.

The monstrosity of the badger is ill-contrived, and with some disadvantage; the shortness being fixed into the legs of one side, that might have been more properly placed upon the *diagonal* movers. *Browne's Vulgar Errours.*

When a man has in his mind the idea of two lines, viz. the side and *diagonal* of a square, whereof the *diagonal* is an inch long, he may have the idea also of the division of that line into a certain number of equal parts. *Locke.*

All sorts of stone composed of granules, will cut and rive in any direction, as well in a perpendicular, or in a *diagonal*, as horizontally and parallel to the side of the strata. *Woodward.*

If a region of air be gradually removed from north to south, it would also blow *diagonally* between the north and east. *Darwin.*

DIAGONAL, in geometry, a right line drawn across a quadrilateral figure, from one angle to another; by some called the diameter, and by others the diametral, of the figure. See GEOMETRY.

DIAGORAS, surnamed the Atheist, lived in the ninety-first Olympiad. He was not a native of Athens, but he taught there. He had composed a poem which a certain poet stole from him. He sued the thief, who swore it was his own, and obtained fame by it. This tempted Diagoras to deny a Providence. The Athenians summoned him to give an account of his doctrine. He fled, and they set a price upon his head, promising a reward to any who should kill him; but he took shipping, and was wrecked.

DI'AGRAM, *n. s.* Διαγραμμα. A delineation of geometrical figures; a mathematical scheme.

Many a fair precept in poetry is like a seeming demonstration in the mathematics; very specious in the *diagram*, but failing in the mechanic operation. *Dryden.*

Why do not these persons make a *diagram* of these cogitative lines and angles, and demonstrate their properties of perception and appetite, as plainly as we know the other properties of triangles and circles? *Bentley.*

DIAGRY'DIATES, *n. s.* From Lat. *diagrydium*. Strong purgatives made with diagrydium.

All cholerick humours ought to be evacuated by *diagrydiates*, mixed with tartar, or some acid, or rhubarb powder. *Floyer.*

DIALLING

DI'AL, *n. s.* / DI'AL-PLATE, / DI'ALLING, / DI'ALLIST. } Lat. *diale*, belonging to the day. An instrument for marking the hour of the day. Dialling is the art of making dials.

Full faire of windowes and delightful bowres,
And on the top a *diall* told the houres.
Spenser. Faerie Queene.

O, gentlemen, the time of life is short:
To spend that shortness basely were too long,
Though life did ride upon a *dial's* point
Still ending at the arrival of an hour.
Shakspeare. Henry IV.

It is not necessary in the arts of *dialling* or navigation to mention the true system or earth's motion.
Berkeley.

Strada tells us that the two friends, being each of them possessed of a magnetical needle, made a kind of *dial-plate*, inscribing it with the four-and-twenty letters, in the same manner as the hours of the day are marked upon the ordinary *dial-plate*.
Addison's Spectator.

Scientifick *dialists*, by the geometrick considerations of lines, have found out rules to mark out the irregular motion of the shadow in all latitudes, and, on all planes. *Moxon.*

While dial is derived from the Latin dies, day, because it indicates the hour of the day, the ancients also called it sciatherium, from its effect by the shadow.

1. DIALLING may be defined the art of drawing dials on the surface of any given body, whether plane or curved. By the Greeks and Romans this art is called gnomonica, and sciatherica, because it distinguishes the hours by the shadow of the gnomon.

2. This art is of great antiquity, for we read in Isaiah, xxxviii. 8, of the dial of Ahaz, who began to reign 400 years before Alexander, and within twelve years of the building of Rome.

3. Among the ancients Anaximenes the Milesian, and Thales, are said to have made dials; and Vitruvius mentions one made by the ancient Chaldee historian Berosus, on a reclining plane almost parallel to the equator.

4. Aristarchus of Samos invented the hemispherical dial, and there were at the same time some spherical ones, with a needle for a gnomon. The discus of Aristarchus was an horizontal dial, with its rim raised up all around to prevent the shadow from stretching too far.

5. It was late before the Romans became acquainted with dials. The first sun-dial at Rome was set up by Papirius Cursor, about the year of the city 460; before which time, says Pliny, there is no mention of any reckoning of time but by the sun's rising and setting: it was set up at or near the temple of Quirinus, but was very inaccurate. About thirty years after M. Valerius Messala, being consul, brought out of Sicily another dial, which he set up on a pillar near the rostrum; but because it was not made for that latitude it did not show the time truly. They made use of it for ninety-nine years; till Martius Philippus set up another more exact.

6. The first professed writer on dialling is Clavius: who demonstrates both the theory and the operations, after the manner of the ancient mathematicians; but with so much intricacy, that few perhaps ever read them all. Dechales and Ozanam give much simpler demonstrations in their Courses, and Wolfius in his Elements. M. Picard has given a new method of making large dials, by calculating the hour lines; and M. De la Hire, in his Dialling, printed in 1683, a geometrical method of drawing hour lines from certain points determined by observation. Eberhardus Welperus, in 1625, published his Dialling, in which he lays down a method of drawing the primary dials on a very easy foundation. The same foundation is described at length by Sebastian Munster, in his Rudimenta Mathematica, published in 1551.

7. Sturmius, in 1672, published a new edition of Welperus's Dialling, with the addition of a whole second part, about inclining and declining dials, &c. In 1708 the same work, with Sturmius's additions, was republished, with the addition of a fourth part, containing Picard's and De la Hire's methods of drawing large dials. Paterson, Michael and Muller, have each written on dialling in German; Coetsius, in his Horologiographia Plana, printed in 1689; Gauppenius in his Gnomonica Mechanica; Bion in his Use of Mathematical instruments; the late ingenious Mr. Ferguson in his Select Lectures; Mr. Emerson in his Dialling; and Mr. W. Jones in his Instrumental Dialling, &c.

DEFINITIONS.

8. A dial is a surface, generally plane, upon which lines are described in such a manner, that the shadow of a wire, or of the upper edge of another plane, erected perpendicularly on the former, may show the time of the day.

9. The edge of the plane by which the time of the day is found is called the stile of the dial, which must be parallel to the earth's axis; and the line on which the said plane is erected is called the substile.

10. The angle included between the substile and stile is called the elevation, or height, of the stile.

11. Dials, the planes of which are parallel to the plane of the horizon, are called horizontal dials; and those which have their planes perpendicular to the plane of the horizon, are called vertical, or erect, dials.

12. Erect dials, the planes of which directly front the north or south, are called direct north, or south, dials: all other erect dials are called decliners, because their planes are turned away from the north or south.

13. Dials, the planes of which are neither parallel nor perpendicular to the plane of the horizon, are called inclining or reclining dials, according as their planes make acute or obtuse angles

with the horizon; and, if their planes are also turned aside from facing the south or north, they are called declining inclining, or declining reclining, dials.

14. The intersection of the plane of the dial, with that of the meridian, passing through the stile, is called the meridian of the dial, or the hour line of XII.

15. Meridians, the planes of which pass through the stile, and make angles of 15°, 30°, 45°, 60°, 75°, and 90°, with the meridian of the place, which marks the hour line of XII, are called hour circles; and their intersections with the plane of the dial are called hour lines.

16. In all declining dials the substile makes an angle with the hour line of XII., and this angle is called the distance of the substile from the meridian.

17. The declining plane's difference of longitude is the angle formed at the intersection of the stile and plane of the dial, by two meridians; one of which passes through the hour line of XII, and the other through the substile.

Principles of Dialling.

18. If the whole earth, *a* P *e p*, fig. 1, plate I., were transparent and hollow, like a sphere of glass, and had its equator divided into twenty-four equal parts by so many meridian semicircles, *a*, *b*, *c*, *d*, *e*, *f*, *g*, &c., one of which is the geographical meridian of any given place, as London, (which is supposed to be at the point *a*); and if the hour of XII were marked at the equator, both upon that meridian and the opposite one, and all the rest of the hours in order on the rest of the meridians, those meridians would be the hour circles of London: then, if the sphere had an opaque axis, as P E*p*, terminating in the poles P and *p*, the shadow of the axis would fall upon every particular meridian and hour when the sun came to the plane of the opposite meridian, and would consequently show the time at London, and at all other places on the meridian of London.

19. If this sphere were cut through the middle by a solid plane, A B C D, in the rational horizon of London, one-half of the axis E P would be above the plane, and the other half below it; and, if straight lines were drawn from the centre of the plane to those points where its circumference is cut by the hour circles of the sphere, those lines would be the hour lines of a horizontal dial for London: for the shadow of the axis would fall upon each particular hour line of the dial when it fell upon the like hour circle of the sphere.

20. If the plane which cuts the sphere be upright, as A F C G, fig. 2. touching the given place (London) at F, and directly facing the meridian of London, it will then become the plane of an erect direct south dial; and if right lines be drawn, from its centre, E, to those points of its circumference where the hour circles of the sphere cut it, these will be the hour lines of a vertical or direct south dial for London, to which the hours are to be set, as in the figure, and the lower half, E*p*, of the axis will cast a shadow on the hour of the day in this dial, at the same time that it would fall upon the like hour circle of the sphere if the dial plane were horizontal.

21. If the plane (still facing the meridian) be made to incline, or recline, any given number of degrees, the hour circles of the sphere will still cut the edge of the plane in those points to which the hour lines must be drawn straight from the centre; and the axis of the sphere will cast a shadow on these lines at the respective hours.

22. The same will be the case if the plane be made to decline by any given number of degrees from the meridian towards the east or west: provided the declination be less than 90°, or the reclination be less than the co-latitude of the place; and the axis of the sphere will be a gnomon, or stile, for the dial. But it cannot be a gnomon when the declination is quite 90°, nor when the reclination is equal to the co-latitude; because, in these two cases, the axis has no elevation above the plane of the dial. And thus it appears that the plane of every dial represents the plane of some great circle upon the earth; and the gnomon the earth's axis, whether it be a fine wire, as in the above figures, or the edge of a thin plate, as in the common horizontal dials.

23. The whole earth, as to its bulk, is but a point, if compared to its distance from the sun; and therefore, if a small sphere of glass be placed upon any part of the earth's surface, so that its axis be parallel to the axis of the earth, and the sphere have such lines upon it, and such planes within it, as above described, it will show the hours of the day as truly as if it were placed at the earth's centre, and the shell of the earth were as transparent as glass.

24. But because it is impossible to have a hollow sphere of glass, perfectly true, blown round a solid plane; or, if it were, we could not get at the plane within the glass to set it in any given position; we make use of a wire sphere to explain the principles of dialling, by joining twenty-four semicircles together at the poles, and putting a thin flat plate of brass within it, as is shown in the preceding figures.

Dialling by the Terrestrial Globe.

25. A common globe of twelve inches diameter has generally twenty-four meridian semicircles drawn upon it. If such a globe be elevated to the latitude of any given place, and turned about until one of these meridians cut the horizon in the north point, where the hour of XII is supposed to be marked, the rest of the meridians will cut the horizon at the respective distances of all the other hours from XII. And if these points of distance be marked on the horizon, and the globe be taken out of the horizon, and a flat board or plate be put into its place, even with the surface of the horizon; then if straight lines be drawn from the centre of the board, to those points of distance on the horizon which were cut by the semicircles; these lines will be the hour lines of a horizontal dial for that latitude, the edge of whose gnomon must be in the very same situation in which the axis of the globe was before it was taken out of the horizon: that is, the gnomon must make an angle with the plane of the dial,

equal to the latitude of the place for which the dial is made.

26. If the pole of the globe be elevated to the co-latitude of the given place, and any meridian be brought to the north point of the horizon, the rest of the meridians will cut the horizon in the respective distances of all the hours from XII, for a direct south dial, the gnomon of which must form an angle with the plane of the dial equal to the co-latitude of the place; and the hours on this dial must be placed in a direction contrary to that in which they stand on the horizontal dial.

27. But if the globe have more than twenty-four meridian semicircles upon it, we must take the following method for making horizontal and south dials:—Elevate the pole to the latitude of the place, and turn the globe until any particular meridian (suppose the first) comes to the north point of the horizon, and the opposite meridian will cut the horizon in the south. Then set the hour index to the uppermost XII on its circle, and turn the globe westward until 15° of the equator pass under the brazen meridian, and the hour index will be at I, for the sun moves 15° every hour), and the first meridian will cut the horizon in the number of degrees from the north point that I is distant from XII. Turn on until other 15° of the equator pass under the brazen meridian, and the hour index will then be at II, and the first meridian will cut the horizon in the number of degrees that II is distant from XII: and so, by making 15° of the equator pass under the brazen meridian for every hour, the first meridian of the globe will cut the horizon in the distances of all the hours from XII to VI, which is just 90°; and then the distances of XI, X, IX, VIII, VII, and VI, in the forenoon will be the same from XII, as the distance of I, II, III, IV, V, and VI, in the afternoon: and these hour lines continued through the centre, will give the opposite hour lines on the other half of the dial.

28. To make a horizontal dial for the latitude of London, which is 51° 30′ north, elevate the north pole of the globe 51° 30′ above the north point of the horizon; and then turn the globe, until the first meridian (which, on the British terrestrial globe, is that of London), cuts the north point of the horizon, and set the hour index to XII at noon. Then turning the globe westward until the index points successively to I, II, III, IV, V, and VI, in the afternoon, or until 15°, 30°, 45°, 60°, 75°, and 90° of the equator pass under the brazen meridian, the first meridian of the globe will cut the horizon in the following numbers of degrees from the north towards the east, viz. $11\frac{2}{3}$, $24\frac{1}{4}$, $38\frac{1}{12}$, $53\frac{1}{4}$, $71\frac{1}{15}$, and 90; which are the respective distances of the above hours from XII upon the plane of the horizon. To transfer these, and the rest of the hours, to a horizontal plane, draw the parallel right lines $a\,c$, and $d\,b$, fig. 3, upon that plane, as far from each other as is equal to the intended thickness of the gnomon or stile of the dial, and the space included between them will be the meridian or twelve o'clock line on the dial. Cross this meridian at right angles with the six o'clock line, $k\,h$, and setting one foot of the compasses in the intersection a, as a centre, describe the quadrant $k\,e$ with any convenient radius or opening of the compasses; then setting one foot in the intersection b, as a centre, with the same radius describe the quadrant $f\,h$, and divide each quadrant into ninety equal parts or degrees, as in the figure.

29. As the hour lines are less distant from each other about noon than in any other part of the dial, it is best to have the centres of these quadrants at a little distance from the centre of the dial plane, on the side opposite to XII, in order to enlarge the hour distances thereabouts, under the same angles on the plane. Thus the centre of the plane is at C, but the centres of the quadrants are at a and b. Lay a ruler over the point b, and (keeping it there for the centre of all the afternoon hours in the quadrant $f\,h$), draw the hour line of I through 11° 30′ in the quadrant; the hour line of II through 24° 30′; of III through 38° 5′; IV through 53° 30′; and V through 71° 4′: and, because the sun rises about four in the morning on the longest days, at London, continue the hour lines of IV and V in the afternoon through the centre b to the opposite side of the dial.

30. the other quadrant is now to be divided, but it is very obvious that the same minute process need not be gone through in doing so, as the divisions already laid down may be readily transferred to the quadrant $e\,k$; as the labor of dividing both may be much shortened by working from a scale, having a line of chords upon it, as will be shown presently.

31. If a plate similar to this triangle be made as thick as the distance between the lines $a\,c$ and $b\,d$, and set upright between them, touching at a and b, its hypothenuse $a\,g$ will be parallel to the axis of the world, when the dial is truly set; and will cast a shadow on the hour of the day.

32. To make an erect direct south dial, fig. 4, elevate the pole to the co-latitude of the place, and proceed in all respects as above for the horizontal dial, and from VI in the morning to VI in the afternoon; only the hours must be reversed, as in the figure; and the hypothenuse $a\,g$, of the gnomon $a\,g\,h$, must make an angle with the dial-plane equal to the co-latitude of the place. As the sun can shine no longer on this dial than from six in the morning until six in the evening, there is no occasion for having any more than twelve hours upon it.

33. To make a direct dial, declining from the south towards the east or west, elevate the pole to the latitude of the place, and screw the quadrant of altitude to the zenith. Then, if the dial decline towards the E. (which we shall suppose it does), count in the horizon the degrees of declination, from the E. point towards the N. and bring the lower end of the quadrant to that degree of declination at which the reckoning ends. Then bring any particular meridian of the globe (suppose the first) directly under the graduated edge of the upper part of the brazen meridian, and set the hour to XII at noon. Then, keeping the quadrant of altitude at the degree of declination in the horizon, turn the globe eastward on its axis, and observe the degrees cut by the

first meridian in the quadrant of altitude (counted from the zenith), as the hour circle comes to XI, X, IX, &c., in the forenoon, or as 15, 30, 45, &c. degrees of the equator pass under the brazen meridian at these hours respectively; and the degrees then cut in the quadrant by the first meridian, are the respective distances of the forenoon hours from XII on the plane of the dial.

34. Then, for the afternoon hours, turn the quadrant of altitude round the zenith until it comes to the degree in the horizon opposite to that where it was placed before; namely, as far from the W. point of the horizon towards the S. as it was set at first from the E. point towards the N.; and turn the globe westward on its axis, until the first meridian comes to the brazen meridian again, and the hour index to XII; then, continue to turn the globe westward, and as the index points to the afternoon hours, I, II, III, &c., or as 15°, 30°, 45°, &c., of the equator pass under the brazen meridian, the first meridian will cut the quadrant of altitude in the respective number of degrees from the zenith that each of these hours is from XII on the dial. And when the first meridian goes off the quadrant at the horizon in the forenoon, the hour index shows the time when the sun will come upon this dial, and when it goes off the quadrant in the afternoon, the index will point to the time when the sun goes off the dial. Having thus found all the hour distances from XII, lay them down upon the dial plane, either by dividing a semicircle into two quadrants of 90° each (beginning at the hour line of XII), or by the line of chords, as above directed.

35. In all declining dials, the line on which the stile or gnomon stands (commonly called the substile line) makes an angle with the twelve o'clock line, and falls among the forenoon hour lines, if the dial declines towards the E; and among the afternoon hour lines, when the dial declines towards the W. that is, to the left hand from the twelve o'clock line in the former case, and to the right hand from it in the latter.

36. To find the distance of the substile from the twelve o'clock line, if the dial declines from the S. towards the E. count the degrees of the declination in the horizon from the E. point toward the N. and bring the lower end of the quadrant of altitude to that degree of declination where the reckoning ends; then, turn the globe until the first meridian cuts the horizon in the like number of degrees, counted from the S. point toward the E. and the quadrant and the first meridian will then cross one another at right angles; and the number of degrees of the quadrant, which are intercepted between the meridian and the zenith, is equal to the distance of the substile line from the twelve o'clock line; and the number of degrees of the first meridian, which are intercepted between the quadrant and the N. pole, is equal to the elevation of the stile above the plane of the dial.

37. If the dial declines westward from the S., count that declination from the E. point of the horizon towards the S. and bring the quadrant of altitude to the degree in the horizon at which the reckoning ends; both for finding the forenoon hours, and distance of the substile from the meridian: and for the afternoon hours, bring the quadrant to the opposite degree in the horizon, namely, as far from the W. towards the N. and then proceed in all respects as above.

38. Thus when our declining dial is finished, we have four dials, viz. 1. A north dial declining eastward by the same number of degrees; 2. A north dial declining the same number west; 3. A south dial, declining east; and, 4. A south dial declining west; only placing the proper number of hours, and the stile or gnomon respectively, upon each plane. For, in the S. W. plane, the substilar line falls among the afternoon hours; and in the S. E. of the same declination, among the forenoon hours, at equal distances from XII. And so all the morning hours on the W. decliner, will be like the afternoon hours on the E. decliner; and the S. W. decliner, the N. E. decliner, by only extending the hour lines, stile and substile, quite through the centre: the axis of the stile (or edge that casts the shadow on the hour of the day), being in all dials whatever, parallel to the axis of the world, and consequently pointing towards the north pole of the heaven in north latitudes, and towards the south pole, in south latitudes.

Method of constructing Dialling Lines.

39. Describe, with any opening of the compasses, as E A, fig. 5, according to the intended length of the scale, the circle A D C B, and cross it at right angles by the diameters C E A and D E B; divide the quadrant A B first into 9 equal parts, and then each part into 10; so shall the quadrant be divided into 90 equal parts or degrees. Draw the right line A F B for the chord of this quadrant; and, setting one foot of the compasses in the point A, extend the other to the several divisions of the quadrant, and transfer these divisions to the line A F B by the arcs 10, 20, 30, &c., and this will be a line of chords, divided into 90 unequal parts.

40. Divide the quadrant C D into 90 equal parts, and from each point of division draw right lines, as *i*, *k*, *l*, &c., to the line C E; all perpendicular to that line, and parallel to D E, which will divide E C into a line of sines; and although these are seldom put among the dialling lines on a scale, yet they assist in drawing the line of latitudes. For if a ruler be laid upon the point D, and over each division in the line of sines, it will divide the quadrant C B into 90 unequal parts, as B *a* B *b*, &c., shown by the right lines 1 2 *a*, 20 *b*, 30 *c*, &c., drawn along the edge of the ruler. If the right line B C be drawn, subtending this quadrant and the nearest distances, B *a*, B *b*, B *c*, &c., be taken in the compasses from B, and set upon this line in the same manner as directed for the line of chords, it will make a line of latitudes B C, equal in length to the line of chords A B, and an equal number of divisions, but very unequal as to their lengths.

41. Draw the right line D G A, subtending the quadrant D A; and parallel to it, draw the right line *r s*, touching the quadrant D B at the numeral figure 3. Divide this quadrant into six equal parts, as 1, 2, 3, &c., and through these points of division draw right lines from the centre E to the line *r s*, which will divide it at the points where the six hours are to be placed, as in the

figure. If every sixth part of the quadrant be subdivided into four equal parts, right lines drawn from the centre through these points of division, and continued to the line *r s*, will divide each hour upon it into quarters.

Method of constructing Dials by Dialling Lines.

42. This is the easiest of all mechanical methods, and by much the best, when the lines are truly divided: and not only the half hours and quarters may be laid down by all of them, but every fifth minute by most, and every single minute by those where the line of hours is a foot in length. Having drawn the double meridian line *a b*, *c d*, fig. 6, on the plane intended for a horizontal dial, and crossed it at right angles by the six o'clock line *f e*, as in fig. 3, take the latitude of the place with the compasses, from the scale of latitudes, and set that extent from *c* to *e*, and from *a* to *f*, on the six o'clock line: then, taking the whole six hours between the points of the compasses from the scale of hours, with that extent set one foot on the point *e*, and let the other foot fall where it will upon the meridian line *c d*, as at *d*. Do the same from *f* to *b*, and draw the right lines *c d* and *f b*, each of them will be equal in length to the whole scale of hours. Then, setting one foot of the compasses in the beginning of the scale at XII, and extending the other to each hour on the scale, lay off these extents from *a* to *e* for the afternoon hours, and from *b* to *f* for those of the forenoon: this will divide the lines *d e* and *b f* in the same manner as the hour scale is divided at 1, 2, 3, 4, and 6; on which the quarters may also be laid down, if required. Then, laying a ruler on the point *c*, draw the first five hours in the afternoon, from that point, through the dots at the numeral figures 1, 2, 3, 4, 5, on the line *d e;* and continue the lines of IV and V through the centre *c*, to the other side of the dial, for the like hours of the morning: which done, lay the ruler on the point *a*, and draw the last five hours in the forenoon through the dots, 5, 4, 3, 2, 1, on the line *f b;* continuing the hour lines of VII and VIII through the centre *a* to the other side of the dial, for the like hours of the evening; and set the hours to their respective lines, as in the figure. Lastly, make the gnomon the same way as directed above for the horizontal dial, and the whole will be finished.

43. To make an erect south dial, take the co-latitude of your place from the scale of latitudes, and then proceed in all respects for the hour line as in the horizontal dial; only reversing the hours as in fig. 4, and making the angle of the stile's height equal to the co-latitude.

Geometrical method of Drawing the Hour Lines.

44. I. To construct a horizontal dial, fig. 1, plate II.—Describe with any opening of the compasses, as Z L, the two semicircles L F *k* and L Q *k*, upon the centres Z and *z*, where the six o'clock line crosses the double meridian line, and divide each semicircle into twelve equal parts, beginning at L (though strictly speaking, only the quadrants from L to the six o'clock line need be divided); then connect the divisions which are equi-distant from L, by the parallel lines K M, I N, H O, G P, and F Q. Draw V Z for the hypothenuse of the stile, making the angle V Z E equal to the latitude of the place; and continue the line V Z to R. Draw the line R *r* parallel to the six o'clock line, and set off the distance *a* K from Z to Y, the distance *b* I from Z to X, *c* H from Z to W, *d* G from Z to T, and *e* F from Z to S. Then draw the lines S *s*, T *t*, W *w*, X *x*, and Y *y*, each parallel to R *r*. Set off the distance *y* Y, from *a* to 11, and from *f* to 1; the distance *x* X from *b* to 10, and from *g* to 2; *w* W from *c* to 9, and from *h* to 3; *t* T from *d* to 8, and from *i* to 4; *s* S from *e* to 7, and from *n* to 5. Then laying a ruler to the centre Z, draw the forenoon hour lines through the points 11, 10, 9, 8, 7; and laying it to the centre *z*, draw the afternoon lines through the points 1, 2, 3, 4, 5; continuing the forenoon lines of VII and VIII through the centre Z, to the opposite side of the dial, for the like afternoon hours; and the afternoon lines IV and V through the centre *z*, to the opposite side for the like morning hours. Set the hours to these lines as in the figure, and then erect the stile or gnomon, and the dial will be finished.

45. II. To construct a south dial, draw the line V Z, making an angle with the meridian Z L equal to the co-latitude of your place; and proceed in all respects as in the above horizontal dial for the same latitude, reversing the hours as in fig. 4, and making the elevation of the gnomon equal to the co-latitude.

46. III. To construct a north dial. See fig. 2. If the hour lines IV and V, as also VII and VIII on the south dial, fig. 4, plate I. be continued beyond the line VI *a* VI, and the triangle *a g h* turned about the point *a*, till *a h* fall on *a* XII produced, it is evident a north dial is thereby had. The hour line for VII in the morning on the south dial, when produced, forms the hour line for V in the morning on the north dial: and the hour line for V in the afternoon, on the south dial, forms the hour line for VII in the evening on the north dial. The manner of placing the characters for the other hours is therefore obvious.

47. IV. To construct an east dial. On the eastern side of the plane of the meridian, draw a line A B, fig. 3, parallel to the horizon, draw also a line A K, making with A B an angle K A B equal to the complement of the latitude of the place for which the dial is made. Take a point D in A K, and on that point for a centre describe a circle. Through D draw E C perpendicular to A K, thus the circle will be divided into four quadrants; divide two of these quadrants into six equal parts, as in the figure. Draw a straight line F E G perpendicular to E C, the diameter of the circle, and from the centre D through the several divisions, draw the right lines D IV, D V, D VI, D VII, D VIII, D IX, D X, D XI. Through IV, V, VI, VII, &c.; draw lines IV, IV, V, V, &c. parallel to E D C. Lastly, in D erect a stile equal to the radius D E, perpendicular to the plane; or on two little pieces perpendicularly fixed in E C, and equal to the same D E, fit an iron rod parallel to

EC, thus will each index at the several hours project a shadow to the respective hour lines IV IV, V V, VI VI, &c. The east dial, it is obvious, can only show the hours till twelve o'clock.

48. V. To construct a west dial. The construction is perfectly the same as that of an east dial, only that its situation is inverted, and the hours are written accordingly. A west dial, it is obvious, can only be illuminated after noon, and therefore, joined with an east dial, shows all the hours of the day.

Of Universal Dials.

49. I. The universal dial, invented by Pardie, fig. 4, consists of three principal parts; the first whereof is called the horizontal plane A, because in practice it must be parallel to the horizon. In this plane is fixed an upright pin, which enters into the edge of the second part BD, called the meridional plane; which is made of two pieces, the lowest whereof, B, is called the quadrant, because it contains a quarter of a circle, divided into 90°; and it is only into this part, near B, that the pin enters. The other piece is a semicircle D adjusted to the quadrant, and turning in it by a groove, for raising and depressing the diameter EF of the semicircle, which diameter is called the axis of the instrument. The third piece is a circle, G, divided on both sides into twenty-four equal parts, which are the hours. This circle is put upon the meridional plane, so that the axis EF may be perpendicular to the circle, and the point C be the common centre of the circle, semicircle, and quadrant. The straight edge of the semicircle is chamfered on both sides to a sharp edge, which passes through the centre of the circle. On one side of the chamfered part, the first six months of the year are laid down, according to the sun's declination for their respective days, and on the other side the last six months. And against the days on which the sun enters the signs, there are straight lines drawn upon the semicircle, with the characters of the signs marked upon them. There is a black line drawn along the middle of the upright edge of the quadrant, over which hangs a thread H, with its plummet I, for levelling the instrument. From the 23d of September to the 20th of March, the upper surface of the circle must touch both the centre C of the semicircle, and the line of ♈ and ♎; and from the 20th of March to the 23d of September, the lower surface of the circle must touch that centre and line.

50. To find the time of day by this dial, set it on a level place in sun-shine, and adjust it by the levelling screws *k* and *l*, until the plumb-line hangs over the black line upon the edge of the quadrant, and parallel to the said edge; move the semicircle in the quadrant, until the line of ♈ and ♎ (where the circle touches) comes to the latitude of the place in the quadrant: then turn the whole meridional plane BD, with its circle G, upon the horizontal plane A, until the edge of the shadow of the circle falls on the day of the month in the semicircle; and then the meridional plane will be due north and south; the axis EF will be parallel to the axis of the world, and will cast a shadow upon the true time of the day among the hours of the circle.

51. When the instrument is thus rectified, the quadrant and semicircle are in the plane of the meridian, and the circle is then in the plane of the equinoctial. Therefore as the sun is above the equinoctial in summer (in northern latitudes), and below it in winter, the axis of the semicircle will cast a shadow on the hour of the day, on the upper surface of the circle, from the 20th of March till the 23d of September; and from the 23d of September to the 20th of March, the hour of the day will be determined by the shadow of the semicircle upon the lower surface of the circle. In the former case the shadow of the circle falls upon the day of the month, on the lower part of the diameter of the semicircle; and in the latter case on the upper part.

52. The method of laying down the months and signs upon the semicircle is as follows:— Draw the right line ACB, fig. 5, equal to the diameter of the semicircle ADB, and cross it in the middle at right angles with the line ECD, equal in length to ADB; then EC will be the radius of the circle FCG, which is the same as that of the semicircle. Upon E, as a centre, describe the circle FCG, on which set off the arcs C*h* and C*i*, each equal to 23½°, and divide them accordingly into that number for the sun's declination. Then laying the edge of a ruler over the centre E, and also over the sun's declination for every fifth day of each month, mark the points on the diameter AB of the semicircle from *a* to *g*, which are cut by the ruler; and there place the days of the months accordingly, answering to the sun's declinations. Then setting one foot of the compasses in C, and extending the other to *a* or *g*, describe the semicircle *abcdefg*; which divide into six equal parts, and through the points of division draw right lines parallel to CD, for the beginning of the signs (of which one half are on one side of the semicircle, and the other half on the other), and set the characters of the signs to their proper lines, as in the figure.

53. II. The universal, or astronomical equinoctial ring-dial is an instrument that serves to find out the hour of the day in any latitude. It consists of two flat rings or circles, usually from four to twelve inches diameter, and of a moderate thickness; the outward ring representing the meridian of the place it is used at, contains two divisions of 90° each, opposite to one another, serving to let a sliding piece and ring (by which the dial is usually suspended) be placed on one side, from the equator to the N. pole, and on the other side to the S., according to the latitude of the place. The inner ring represents the equator, and turns diametrically within the outer, by means of two pivots inserted in each end of the ring at the hours XII. Across the two circles is screwed to the meridian a thin pierced plate or bridge, with a cursor, that slides along the middle of the bridge: this cursor has a small hole for the sun to shine through. The middle of this bridge is conceived as the axis of the world, and its extremities as the poles; on the one side are delineated

the twelve signs of the zodiac, and sometimes opposite the degrees of the sun's declination; and on the other side the days of the month throughout the year. On the other side of the outer ring A are the divisions of 90°, or a quadrant of latitude. It serves, by the placing of a common pin in the hole, to take the sun's altitude, from which the latitude of the place may easily be found.

54. In using this dial, place the line in the middle of the sliding piece, over the degree of latitude of the place. Suppose, for example, 51½ for London; put the line which crosses the hole of the cursor C to the day of the month of the degree of the sign. Open the instrument till the two rings be at right angles to each other, and suspend it by the ring, that the axis of the dial represented by the middle of the bridge may be parallel to the axis of the earth, viz. the north pole to the north, and vice versâ. Then turn the flat side of the bridge towards the sun, so that his rays passing through the small hole in the cursor may fall exactly in a line drawn through the middle of the concave surface of the inner ring or hour-circle, the bright spot shows the hour of the day in the said concave surface of the dial. The hour XII cannot be shown by this dial, because the outer ring, being then in the plane of the meridian, excludes the sun's rays from the inner; nor can this dial show the hour when the sun is in the equinoctial, because his rays, then falling parallel to the plane of the inner circle or equinoctial, are excluded by it.

55. III. Figs. 6, 7, and 8, a universal dial on a plain cross, as described by Mr. Ferguson. It is moveable on a joint C, for elevating it to any given latitude on the quadrant C *o* 90, as it stands upon the horizontal board A. The arms of the cross stand at right angles to the middle part; and the top of it, from *a* to *n*, is of equal length with either of the arms *n e* or *m k*. See fig. 6. The dial is rectified by setting the middle line *t u* to the latitude of the place on the quadrant, the board A level, and the point N. northward by the needle; thus, the plane of the cross will be parallel to the plane of the equator. Then, from III o'clock in the morning till VI, the upper edge *k l* of the arm *i o* will cast a shadow on the time of the day on the side of the arm *c m*; from VI till IX, the lower edge *i* of the arm *i o* will cast a shadow on the hours on the side *o q*. From IX in the morning to XII at noon, the edge *a b* of the top part *a n* will cast a shadow on the hours on the arm *n e f*; from XII to III in the afternoon, the edge *c d* of the top part will cast a shadow on the hours on the arm *k l m*; from III to VI in the evening, the edge *g h* will cast a shadow on the hours on the part *p u*; and from VI to IX, the shadow of the edge *e f* will show the time on the top part *a n*. The breadth of each part *a b*, *e f*, &c., must be so great, as never to let the shadow fall quite without the part or arm on which the hours are marked, when the sun is at his greatest declination from the equator.

56. To determine the breadth of the sides of the arms which contain the hours, so as to be in just proportion to their length; make an angle A B C, fig. 7, of 23° 30′, which is equal to the sun's greatest declination: and suppose the length of each arm, from the side of the long middle part, and also the length of the top part above the arms, to be equal to B *d*. Then as the edges of the shadow, from each of the arms, will be parallel to B *e*, making an angle of 23° 30′ with the side B *d* of the arm, when the sun's declination is 23° 30′; it is plain, that if the length of the arm be B *d*, the least breadth that it can have, to keep the edge B *e* of the shadow B *e g d* from going off the side of the arm *d e* before it comes to the end of it *e d*, must be equal to *e d* or *d* B. But to keep the shadow within the quarter divisions of the hours, when it comes near the end of the arm, the breadth of it should be still greater, so as to be almost doubled, on account of the distance between the tips of the arms.

57. The hours may be placed on the arms, by laying down the cross *a b c d*, fig. 8, on a sheet of paper; and with a black lead pencil held close to it drawing its shape and size on the paper. Then take the length *a e* in the compasses, and with one foot in the corner *a*, describe with the other the quadrant *e f*. Divide this arc into six equal parts, and through the points of division draw right lines *a g*, *a h*, &c., continuing three of them to the arm *c e*, which are all that can fall upon it; and they will meet the arm in those points through which the lines that divide the hours from each other are to be drawn right across it. Divide each arm for the three hours contained in it, in the same manner; and set the hours to their proper places, on the sides of the arms, as they are marked in fig. 6. Each of the hour spaces should be divided into four equal parts, for the half hours and quarters, to the quadrant *e f*; and right lines should be drawn through these division-marks in the quadrant, to the arms of the cross, in order to determine the places thereon where the subdivision of the hours must be marked. This kind of universal dial is easily made, and has a pretty uncommon appearance in a garden.

58. IV. The universal mechanical dial, fig. 9, affords, by its equinoctial circle, an easy method of describing a dial on any kind of plane. For example: suppose a dial is required on a horizontal plane. If the plane be immoveable, as A B C D, find a meridian line as G F; or, if moveable, assume the meridian at pleasure: then by means of the triangle E K F, whose base is applied on the meridian line, raise the equinoctial dial H till the index G I becomes parallel to the axis of the earth (which is so, if the angle K E F be equal to the elevation of the pole), and the XII o'clock line on the dial hang over the meridian line of the plane or the base of the triangle. If then, in the night, or in a dark place, a lighted candle be successively applied to the axis G I, so as the shadow of the index or style G I fall upon one hour line after another, the same shadow will mark out the several hour lines on the plane A B C D. Noting points, therefore, on the shadow, draw lines through them to G; then an index being fixed on G, according to the angle I G F, its shadow will point out the several hours by the light of the sun. If a dial were required on a vertical plane, having raised the equinoctial circle as directed, push

forward the index G I till the tip thereof, I, touch the plane. If the plane be inclined to the horizon, the elevation of the pole should be found on the same; and the angle of the triangle K E F should be made equal thereto.

59. V. Fig. 1, plate III., represents a universal dial, which shows the hour of the day by a terrestrial globe, and by the shadows of several gnomons, at the same time; together with all the places of the earth which are then enlightened by the sun; and those to which the sun is then rising, or on the meridian or setting. This dial is made of a thick square piece of wood, or hollow metal. The sides are cut into semicircular hollows, in which the hours are placed; the stile of each hollow coming out from the bottom thereof as far as the ends of the hollows project. The corners are cut out into angles, in the insides of which the hours are also marked; and the edge of the end of each side of the angle serves as a stile for casting a shadow on the hours marked on the other side. In the middle of the uppermost side, or plane, there is an equinoctial dial; in the centre of which an upright wire is fixed, for casting a shadow on the hours of that dial, and supporting a small terrestrial globe on the top.

60. The whole dial stands on a pillar, in the middle of a round horizontal board, in which there is a compass and magnetic needle, for placing the meridian stile towards the S. The pillar has a joint with a quadrant upon it, divided into 90°, for setting it to the latitude of any given place. The equator of the globe is divided into twenty-four equal parts, and the hours are laid down upon it at these parts. The time of the day may be known by these hours, when the sun shines upon the globe.

61. To rectify and use this dial, set it on a level table, or on the sole of a window, where the sun shines, placing the meridian style due S. by means of the needle; which will be, when the needle points as far from the N. fleur-de-lis toward the W. as it declines westward at the place. Then bend the pillar in the joint, till the black line on the pillar comes to the latitude of the place in the quadrant. The machine being thus rectified, the plane of its dial part will be parallel to the equator, the wire or axis that supports the globe will be parallel to the earth's axis, and the N. pole of the globe will point toward the N. pole of the heavens.

62. The same hour will then be shown in several of the hollows, by the ends of the shadows of their respective stiles; the axis of the globe will cast a shadow on the same hour of the day, in the equinoctial dial, in the centre of which is it placed, from the 20th of March to the 23rd of September; and, if the meridian of the place on the globe be set even with the meridian stile, all that part of the globe that the sun shines upon will answer to those places of the real earth which are then enlightened by the sun. The places where the shade is just coming upon the globe, answer to all those places of the earth in which the sun is then setting; as the places where it is going off, and the light coming on, answer to all the places of the earth where the sun is then rising. And lastly, if the hour of VI be marked on the equator in the meridian of the place (as it is marked on the meridian of London in the figure), the division of the light and shade on the globe will show the time of the day.

63. The northern stile of the dial is hid in the figure by the axis of the globe. The hours in the hollow to which that stile belongs, are also supposed to be hid by the oblique view of the figure: but they are the same as the hours in the front hollow. Those also in the right and left hand semicircular hollows are mostly hid from sight; and so also are all those on the sides next the eye of the four acute angles.

64. The construction of this dial is as follows: on a thick square piece of wood, or metal, draw the lines *ac* and *bd*, fig. 2, as far from each other as you intend for the thickness of the stile *abcd*; and in the same manner, draw the like thickness of the other three stiles, *efgh*, *iklm*, and *nopq*, all standing outright as from the centre. With any convenient opening for the compasses, as *a*A, so as to leave proper strength when K I is equal to *a*A, set one foot in *a*, as a centre, and with the other describe the quadrantal arc A*c*. Then, without altering the compasses, set one foot in *b* as a centre, and with the other describe the quadrant *d*B. All the other quadrants in the figure must be described in the same manner, and with the same opening of the compasses, on their centres *efik*, and *no*, and each quadrant divided into six equal parts, for as many hours, as in the figure; each of which parts must be subdivided into four, for the half hours and quarters. At equal distances from each corner, draw the right lines I*p* and K*p*, L*q* and M*q*, N*r* and O*r*, P*s* and Q*s*: to form the four angular hollows I*p*K, L*q*M, N*r*O, and P*s*Q; making the distances between the tips of these hollows, as I K, L M, N O, and P Q, each equal to the radius of the quadrants: and leaving sufficient room within the angular points *pqr* and *s*, for the equinoctial in the middle.

65. To divide the inside of these angles for the hour spaces, take the following method:—Set one foot of the compasses in the point I as a centre, and open the other to K; and with that opening describe the arc K*t*: then, without altering the compasses, set one foot in K, and with the other describe the arc I*t*. Divide each of these arcs, from I and K to their intersection at *t*, into four equal parts; and from their centres I and K, through the points of division, draw the right lines I 3, I 4, I 5, I 6, I 7: and K 2, K 1, K 12, K 11; and they will meet the sides K*p* and I*p* of the angle I*p*K where the hours thereon must be placed. And these hour spaces in the arcs must be subdivided into four equal parts, for the half hours and quarters. Do the like for the other three angles, and draw the dotted lines, and set the hours in the insides where those lines meet them, as in the figure; and the like hour lines will be parallel to each other in all the quadrants and in all the angles. Mark points for all these hours on the upper side: and cut out all the angular hollows, and the quadrantal ones quite through the places where their four gnomons must stand; and lay down the hours on their insides, and set in their gnomons, which must be as broad as the dial is thick, and this

breadth and thickness must be large enough to keep the shadows of the gnomons from ever falling quite out of the sides of the hollows, even when the sun's declination is at the greatest. Lastly, draw the equinoctial dial in the middle, all the hours of which are equidistant from each other; and the dial will be finished.

66. As the sun goes round, the broad end of the shadow of the stile *acbd* will show the hours in the quadrant A*c*, from the sun-rise till VI in the morning; the shadow from the end M will show the hours on the side L*q* from V to IX in the morning; the shadow of the stile *efgh* in the quadrant D*g* in the long days, will show the hours from sun-rise till VI in the morning; and the shadow of the end N will show the morning hours, on the side O*r*, from III to VII. Just as the shadow of the northern stile *abtd* goes off the quadrant A*c*, the shadow of the southern stile *iklm* begins to fall within the quadrant F*l*, at VI in the morning; and shows the time, in that quadrant, from VI to XII at noon; and from noon till VI in the evening, in the quadrant *m*E. And the shadow of the end O shows the time from XI in the forenoon till III in the afternoon, on the side *r*N; as the shadow of the end P shows the time from IX in the morning till I o'clock in the afternoon on the side Q*s*.

67 At noon, when the shadow of the eastern stile *efgh* goes off the quadrant *h*C, in which it showed the time from VI in the morning till noon, as it did in the quadrant *g*D, from sun-rise till VI in the morning, the shadow of the western stile *nopq* begins to enter the quadrant H*p*; and shows the hours thereon from XII at noon till VI in the evening: and after that till sun-set, in the quadrant *q*G; and the end Q casts a shadow on the side P*s*, from V in the evening till IX at night, if the sun be not set before that time. The shadow of the end I shows the time on the side K*p* from III till VII in the afternoon; and the shadow of the stile *abcd* shows the time from VI in the evening till the sun sets. The shadow of the upright central wire, that supports the globe at top, shows the time of the day, in the middle or equinoctial dial, all the summer half-year, when the sun is on the north side of the equator.

Dialling by Spherical Trigonometry.

68. The construction of sun-dials on all planes whatever, may be included in one general rule; sufficiently intelligible, if that of a horizontal dial for any given latitude be well understood. For there is no plane, however obliquely situated with respect to any given place, but what is parallel to the horizon of some other place; and, therefore, if we can find that other place, by a problem, on the terrestrial globe, or by a trigonometrical calculation, and construct a horizontal dial for it; that dial applied to the place where it is to serve will be a true dial for that place.—Thus, an erect direct south dial in 51° 30′ N. lat. would be a horizontal dial on the same meridian, 90° southward of 51° 30′ N. lat.: which falls in with 38° 30′ S. lat. But if the upright plane declines from facing the south at the given place, it would still be a horizontal plane 90° from that place, but for a different longitude, which would alter the reckoning of the hours accordingly.

69. To calculate the angles which the hour lines of a horizontal dial make with the meridian or twelve o'clock line, see fig. 3. Let NESW represent the horizon of any place, PSN the meridian, and P the N. pole of the sphere: let KPH be any hour circle, for example, the circle which makes with the meridian an angle of 15°, then the arch of the horizon intercepted between N, the north, and PH the hour circle, in the plane of which the sun is at XI or I o'clock, measures the angle contained by the substile of the dial, and the hour lines corresponding to these hours. In the spherical triangle PNH, right angled at N, there are given the side PN, which is the elevation of the pole above the horizon, and the angle NPH which is contained by the meridian and hour circle, to find NH the arch of the horizon opposite that angle. By spherical trigonometry, radius is to the sine of PN as the tangent of NPH to the tangent of NH the side required. Hence we have this practical rule. To find the angle which any hour line of a horizontal dial makes with the meridian, or which is the same, to find the angle which the hour lines on any dial make with the substile.—To the logarithmic sine of the latitude of the place for which the dial is made, add the logarithmic tangent of the sun's distance from the meridian, for the hour required, the sum, 1—10, is the logarithmic tangent of the angle required.

70. *Example.*—To find the angles which the hour lines of XI or I make with the meridian of a horizontal dial for the latitude of London, which is 51° 30′.

To logarithmic sine of 51° 30′	9·89354
Add logarithmic tangent of 15°	9·42805
Sum, rejecting 10, is . .	9·32159

which is the tangent of 11° 51′ nearly. In like manner it will be found, that the hour lines of X and II make each with the meridian an angle of 24° 18′, &c. And by computing in this manner, with the sine of the latitude, and the tangents of 30°, 45°, 60°, and 75°, for the hours of II, III, IV, and V in the afternoon; or of X, IX, VIII, and VII in the forenoon; you will find their angular distances from XII to be 24° 18′, 38° 3′, 53° 35′, and 71° 6′; which are all that there is occasion to reckon. And these distances may be set off from XII by a line of chords; or rather, by taking 1000 from a scale of equal parts, and setting that extent as a radius from C to XII, fig. 4, and then, taking 209 of the same parts, which are the natural tangents of 11° 50′, and setting them from XII to XI and I, on the line H O, which is perpendicular to C XII: and so for the rest of the hour lines, which in the table of natural tangents, against the above distances, are 452, 782, 1355, and 2920, of such equal parts from XII, as the radius C XII contains 1000. And, lastly, set off 1257, the natural tangent of 51° 30′, for the angle of the

stile's height, which is equal to the latitude of the place.

Declining Dials.

71. Let us suppose that an upright plane at London declines 36° westward from facing the south, and that it is required to find a place on the globe to the horizon of which the said plane is parallel; and also the difference of longitude between London and that place.

72. Let N E S W be the horizon of London, fig. 5, whose zenith is Z, and P the N. Pole of the sphere; and let Z*h* be the position of a vertical plane at Z, declining westward from S (the south) by an angle of 36°; on which plane an erect dial for London at Z is to be described. Make the semi-diameter Z D perpendicular to Z*h*, and it will cut the horizon in D, 36° west of the south S. Then a plane, in the tangent H D, touching the sphere in D, will be parallel to the plane Z*h*; and the axis of the sphere will be equally inclined to both these places. Let W Q E be the equinoctial, whose elevation above the horizon of Z (London) is 38° 30′: and P R D be the meridian of the place D, cutting the equinoctial in R. Then it is evident, that the arc R D is the latitude of the place D, where the plane Z*h* would be horizontal, and the arc R Q is the difference of longitude of the planes Z*h* and D H.

73. In the spherical triangle W D R, the arc W D is given, for it is the complement of the plane's declination from S the south; which complement is 54°, viz. 90°—36°: the angle at R, in which the meridian of the place D cuts the equator, is a right angle; and the angle R W D measures the elevation of the equinoctial above the horizon of Z, namely 38° 30′. Say, therefore, as radius is to the co-sine of the plane's declination from the south, so is the co-sine of the latitude of Z to the sine of R D the latitude of D: which is of a different denomination from the latitude of Z, because Z and D are on different sides of the equator.

As radius	10·00000
To co-sine 36° 0′ = R Q .	9·90796
So co-sine 51° 30′ = Q Z .	9·79415
To sine 30° 14′ = D R	9·70211 = the latitude of D, whose horizon is parallel to the vertical plane Z*h* at Z.

74. To find R Q the difference of longitude of the places D and Z; say, as radius is to the co-sine of R W D 38° 30′, the height of the equinoctial at Z, so is the co-tangent of D W 36° the plane's declination, to the co-tangent of R Q the difference of longitudes. Thus,

To the logarithmic sine of 51° 30′	9·89354
Add the logarithmic tangent of 54° 0′	10·13874
Their sum rejecting 10 . . .	10·03228

is the nearest tangent of 47° 8′ = W R; which is the co-tangent of 42° 52′ = R Q, the difference of longitude sought. Which difference, being reduced to time, is 2 h. 51½ m.

75. And thus having found the latitude and longitude of the place D, to whose horizon the vertical plane at Z is parallel, we proceed to the construction of a horizontal dial for the place D, whose latitude is 30° 14′ south; but anticipating the time at D by 2 h. 51 m., neglecting the half minute in practice, because D is so far westward in longitude from the meridian of London; and this will be a true vertical dial at London, declining westward 36°.

76. Assume any right line C S L, fig. 4, for the substile of the dial, and make the angle K C P equal to the latitude of the place, viz. 30° 14′, to the horizon of which the plane of the dial is parallel; then C R P will be the axis of the stile, or edge that casts the shadow on the hours of the day, in the dial. This done, draw the contingent line E Q, cutting the substilar line at right angles in K; and from K make K R perpendicular to the axis C R P. Then K G = K R being made radius, that is, equal to the chord of 60°, or tangent of 45° on a good sector, take 42° 52′ (the difference of longitude of the places Z and D) from the tangents, and having set it from K to M, draw C M for the hour line of XII. Take K N, equal to the tangent of an angle less by 15° than K M; that is, the tangent of 27° 52′: and through the point N draw C N for the hour line of I. The tangent of 12° 52′ (which is 15° less than 27° 52′), set off the same way, will give a point between K and N, through which the hour line of II is to be drawn. The tangent of 2° 8′, the difference between 45° and 50° 42′ placed on the other side of C L, will determine the point through which the hour-line of III is to be drawn; to which 2° 8′, if the tangent of 15° be added, it will make 17° 8′; and this set off from K towards Q, on the line E Q, will give the point for the hour line of IV; and so of the rest. The forenoon hours line are drawn the same way, by the continual addition of the tangents 15°, 30°, 45°, &c., to 42° 52′ = the tangent K M for the hours of XI, X, IX, &c., as far as necessary; that is, until there be five hours on each side of the substile. The sixth hour, accounted from that hour or part of the hour on which the substile falls, will be always in a line perpendicular to the substile, and drawn through the centre C.

77. In all erect dials, C M, the hour line of XII is perpendicular to the horizon of the place for which the dial is to serve; for that line is the intersection of a vertical plane with the plane of the meridian of the place, both which are perpendicular to the plane of the horizon; and any line H O, or *ho*, perpendicular to C M, will be a horizontal line on the plane of the dial, along which line the hours may be numbered; and C M being set perpendicular to the horizon, the dial will have its true position.

78. If the plane of the dial had declined by an equal angle towards the east, its description would have differed only in this, that the hour-line of XII would have fallen on the other side of the substile C L, and the line H O would have a subcontrary position to what it has in this figure.

79. And these two dials, with the upper points of their stiles turned toward the N. Pole, will serve for other two planes parallel to them; the one declining from the N. towards

the E., and the other from the N. toward the W., by the same quantity of angle. The like holds true of all dials in general, whatever be their declination and obliquity of their planes to the horizon.

80. If the plane of the dial not only declines, but also reclines, or inclines. Suppose its declination from fronting the south S be equal to the arc S D, fig. 6, on the horizon; and its reclination be equal to the arc D *d* of the vertical circle D Z: then it is plain, that if the quadrant of altitude Z *d* D on the globe cuts the point D in the horizon, and the reclination is counted upon the quadrant from D to *d*; the intersection of the hour-circle P R *d*, with the equinoctial W Q E, will determine R *d*, the latitude of the place *d*, whose horizon is parallel to the given place Z *h* at Z; and R Q will be the difference in longitude of the places at *d* and Z. Trigonometrically thus:—Let a great circle pass through the three points, W, *d*, E; and in the triangle W D *d*, right angled at D, the sides W D and D *d* are given; and thence the angle D W *d* is found, and so is the hypothenuse W *d*. Again, the difference, or the sum, of D W *d* and D W R, the elevation of the equinoctial above the horizon of Z, gives the angle *d* W R; and the hypothenuse of the triangle W R *d* was just now found; whence the sides R *d* and W R are found, the former being the latitude of the place *d*, and the latter the complement of R Q, the difference of longitude sought. Thus, if the latitude of the place Z be 52° 30′ N. the declination S D of the plane Z *h* (which would be horizontal at *d*) be 36°, and the reclination be 15°, or equal to the arc D *d*; the south latitude of the place *d*, that is, the arc R *d*, will be 15° 9′; and R Q, the difference of the longitude, 36° 2′. From these data, therefore, let the dial, fig. 7, be described, as in the former example.

81. There are several things requisite in the practice of dialling; the chief of which shall be given in the form of arithmetical rules, simple and easy to those who have learned the elements of trigonometry. For in practical arts of this kind, arithmetic should be used as far as it can go; and scales never trusted to, except in the final construction, where they are absolutely necessary in laying down the calculated hour distances on the plane of the dial,

82. The latitude of the place, the sun's declination, and his hour distance from the meridian, being given, to find, first, his altitude, second, his azimuth. Let *d*, fig. 6, be the sun's place, *d* R, his declination; and in the triangle P Z *d*, P *d* the sum, or the difference of *d* R, and the quadrant P R, being given by the supposition, as also the complement of the latitude P Z, and the angle *d* P Z, which measures the horary distance of *d* from the meridian; we shall (by spheric trigonometry) find the base Z *d*, which is the sun's distance from the zenith, or the complement of his altitude. And, as sine Z *d* : sine P *d* :: sine *d* P Z : *d* Z P, or of its supplement D Z S, the azimuthal distance from the south.

83. Or the practical rule may be as follows: Write A for the sine of the sun's altitude, L and *l* for the sine and co-sine of the latitude, D and *d* for the sine and co-sine of the sun's declination, and H for the sine of the horary distance from VI. Then the relation of H to A will have three varieties.

84. When the declination is towards the elevated pole, and the hour of the day is between XII and VI; it is $A = LD + H\,l\,d$, and $H = \frac{A - LD}{l\,d}$,

85. When the hour is after VI, it is $A = LD - H\,l\,d$, and $H = \frac{LD - A}{l\,d}$

85.* When the declination is toward the depressed pole, we have $A = H\,l\,d - LD$, and $H = \frac{A + LD}{l\,d}$,

86. These theorems will be found useful and expeditious enough for solving those problems, in geography and dialling, which depend on the relation of the sun's altitude to the hour of the day.

87. *Example* I. Suppose the latitude of the place to be 51° 30′ north: the time five hours distant from XII, that is, an hour after VI in the morning, or before VII in the evening; and the sun's declination 2° north. Required the sun's altitude?

Then to log. L = log. sin. 51° 30′ −1·89354
add log. D = log. sin. 20° 0′ −1·53405

Their sum −1·42759 gives
L D = logarithm of 0·267664, in the natural sines.
And, to log. H = log. sin. 15° 0′ −1·41300
add { log. *l* = log. sin. 38° 0′ −1·79414
{ log. *d* = log. sin. 70° 0′ −1·97300

Their sum −1·18014 gives
H *l d* = logarithm of 0·151408, in the natural sines. And these two numbers (0·267664 and 0·151408) make 0·419072 = A; which, in the table, is the nearest natural sine of 25° 47′, the sun's altitude sought.

88. In these calculations the radius is considered as unity, and not 10·00000, by which, instead of the index 9, we have −1, which only makes the work a little easier.

89. The same hour distance being assumed on the other side of VI, then L D — *H l d* is 0·116256, the sine of 60° 40′ 30″; which is the sun's altitude at V in the morning, or VII in the evening, when his N. declination is 20°. But when the declination is 20° S. (or towards the depressed pole) the difference H *l d*—L D becomes negative; and thereby shows, that an hour before VI in the morning, or past VI in the evening, the sun's centre is 6° 40′ 30″ below the horizon.

90. *Example* II. From the same data to find the sun's azimuth. If H, L, and D, are given, then from H having found the altitude and its complement Z *d*: and the arc P *d* (the distance from the pole) being given; say, As the co-sine of the altitude is to the sine of the distance from the pole, so is the sine of the hour distance from the meridian to the sine of the azimuth distance from the meridian. Let the latitude be 51° 30′ N., the declination 15° 9′ S., and the time 2 h. 24 m. in the afternoon, when the sun begins to illuminate a vertical wall, and it is required to find the position of the wall. Then, by the fore-

going theorems, the complement of the altitude will be 81° 32′ 30″, and P*d* the distance from the pole being 109° 5′, and the horary distance from the meridian, or the angle *d* P Z, 36°.

To log. sin. 74° 51′	−1·98464
Add log. sin. 36° 0′	−1·76922
And from the sum	−1·75386
Take the log. sin. 81° 32½′	−1·99525
Remains	−1·75861 = log. sin.

35°, the azimuth distance sought.

91. When the altitude is given, find from thence the hour, and proceed as above. This praxis is of singular use on many occasions; as, 1. In finding the declination of vertical planes more exactly than in the common way, especially if the transits of the sun's centre are observed by applying a ruler with sights, either plain or telescopical, to the wall or plane whose declination is required. 2. In drawing a meridian line, and finding the magnetic variation. 3. In finding the bearings of places in terrestrial surveys; the transits of the sun over any place, or his horizontal distance from it, being observed, together with the altitude and hour; and thence determining small differences of longitude. 4. In observing the variations at sea, &c.

Of finding the Declination, Inclination, and Reclination of Planes.

92. The declination, inclination, and reclination of planes are frequently taken with a sufficient degree of accuracy by an instrument called the declinator or declinatory.

92.* The construction of this instrument, as somewhat improved by Mr. Jones, is thus: On a mahogany board is inserted a semicircular arch of ivory or box-wood, divided into two quadrants of 90° each, beginning from the middle. On the centre of this arch turns a vertical quadrant, which is divided into 90°, beginning from the base; on which is a moveable index, with a small hole for the sun's rays to pass through, and form a bright spot on a certain mark. The lower extremity is pointed, to mark the linear direction of the quadrant when applied to any other plane; as this quadrant takes off occasionally, and a plumb-line hangs at the centre, for taking the inclinations and reclinations of planes. On the plane of the board is inserted a compass of points and degrees, with a magnetical needle turning on a pivot over it. See Declinatory.

93. The addition of the moveable quadrant and index considerably extend the utility of the declinator, by rendering it convenient for taking equal altitudes of the sun, the sun's altitude, and bearing, at the same time, &c. To apply this instrument in taking the declination of a wall or plane: Place the back part of it in a horizontal direction to the plane proposed, and observe what degree or point of the compass the N. part of the needle stands over from the north or the south, and it will be the declination of the plane from the north or south accordingly. In this case, allowance must be made for the variation of the needle (if any) at the place; and which, if not previously known, will render this operation very inaccurate.

94. But the most exact way for taking the declination of a plane, or finding a meridian line, by this instrument, is, in the forenoon, about two or three hours before twelve o'clock, to observe two or three heights or altitudes of the sun; and at the same time the respective angular polar distances. Write these down; and in the afternoon watch for the same, or one of the same altitudes, and mark the angular distances or distance on the quadrant; the division or degree exactly between the two noted angular distances will be the true meridian, and the distance at which it may fall from the centre of the divisions, will be the declination of the plane. The reason for observing two or three altitudes and angles in the morning is, that in case there should be clouds in the afternoon, we may have the chance of one corresponding altitude.

Of the right placing of Dials.

95. The plane on which the dial is to rest being duly prepared, and every thing necessary for fixing it, you may find the hour with tolerable exactness by a large equinoctial ring-dial, and set your watch to it. And then the dial may be fixed by the watch at your leisure.

96. If you would be more exact, take the sun's altitude by a good quadrant, noting the precise time of observation by a clock or watch. Then compute the time for the altitude observed; and set the watch to agree with that time, according to the sun. Hadley's quadrant is very convenient for this purpose: for by it you may take the angle between the sun and his image reflected from a basin of water; the half of which angle, subtracting the refraction, is the altitude required.

97. This is best done in summer; and the nearer the sun is to the prime vertical, the east or west azimuth, when the observation is made, so much the better. Or, take two equal altitudes of the sun in the same day; one any time between seven and ten in the morning, the other between two and five in the afternoon; noting the moments of these two observations by a clock or watch: and if the watch shows the observations to be at equal distances from noon, it agrees exactly with the sun: if not, the watch must be corrected by half the difference of the forenoon and afternoon intervals; and then the dial may be set true by the watch.

98. For example, suppose you had taken the sun's altitude when it was twenty minutes past VIII in the morning by the watch; and found, by observing in the afternoon, that the sun had the same altitude ten minutes before IV; then it is plain, that the watch was five minutes too fast for the sun: for five minutes after XII is the middle time between VIII h. 20 m. in the morning, and III h. 50 m. in the afternoon; and, therefore, to make the watch agree with the sun, it must be set back five minutes.

99. In many cases, where the situation is suitable, it is very desirable to have a true meridian line for the regulation of clocks and watches; we shall, therefore, here insert Mr. Ferguson's method of constructing one.

Make a round hole, about a quarter of an inch diameter, in a thin plate of metal; and fix the plate in the top of a south window, in such a manner that it may recline from the zenith at an angle equal to the colatitude of your place, as nearly as you can guess: for then the plate will face the sun directly at noon on the equinoctial days. Let the sun shine freely through the hole into the room; and hang a plumb-line to the ceiling of the room, at least five or six feet from the window, in such a place as that the sun's rays, transmitted through the hole, may fall upon the line when it is noon by the clock; and having marked the said place on the ceiling, take away the line.

Having adjusted a sliding bar to a dovetail groove, in a piece of wood about eighteen inches long, and fixed a hook into the middle of the bar, nail the wood to the above-mentioned place on the ceiling parallel to the side of the room in which the window is; the groove and the bar being towards the floor: then hang the plumb-line upon the hook in the bar, the weight or plummet reaching almost to the floor; and the whole will be prepared for further and proper adjustment.

This done, find the true solar time by either of the last two methods, and thereby regulate your clock. Then, at the moment of the next noon by the clock, when the sun shines, move the sliding bar in the groove, until the shadow of the plumb-line bisects the image of the sun, made by his rays transmitted through the hole, on the floor, wall, or on a white screen placed on the north side of the line; the plummet at the end of the line hanging freely in a pail of water placed below it on the floor.—But because this may not be quite correct for the first time, on account that the plummet will not settle immediately, even in water; it may be farther corrected on the following days, by the above method, with the sun and clock; and so brought to a very great exactness.

The rays transmitted through the hole will cast but a faint image of the sun, even on a white screen, unless the room be so darkened that no sunshine may be allowed to enter but what comes through the small hole in the plate. And always, for some time before the observation is made, the plummet ought to be immersed in a jar of water, where it may hang freely; by which means the line will soon become steady, which otherwise would be apt to continue swinging.

Of the Double Horizontal, the Babylonian and Italian Dials.

100. Sometimes a stereographic projection of the hour circles, and the parallels of the sun's declination, is added to the gnomonic projection, on the same horizontal plane; the upright side of the gnomon being sloped into an edge, standing perpendicularly over the centre of the projection: so that the dial, being in its due position, the shadow of that perpendicular edge is a vertical circle passing through the sun, in the stereographic projection. The months being duly marked on this dial, the sun's declination, and the length of the day at any time, are had by inspection; as also his altitude, by means of a scale of tangents. But its chief property is, that it may be placed true, whenever the sun shines, without the help of any other instrument.

101. The Babylonian and Italian dials reckon the hours, not from the meridian as with us, but from the sun's rising and setting. Thus, in Italy, an hour before sun-set is reckoned the twenty-third hour; two hours before sun-set the twenty-second hour; and so of the rest. And the shadow that marks them on the hour-lines, is that of the point of a stile. This occasions a perpetual variation between their dials and clocks, which they must correct from time to time, before it arises to any sensible quantity, by setting their clocks so much faster or slower. And in Italy, they begin their day, and regulate their clocks, not from sun-set, but from about mid-twilight, when the Ave Maria is said; which corrects the difference that would otherwise exist between the clock and the dial. The improvements which have been made in all sorts of instruments and machines for measuring time, have rendered these dials of little account.

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DIALLING in a mine, called also plumbing, is the using of a compass, which the miners call dial, and a long line to know which way the load or vein of ore inclines, or where to shift an air-shaft, or bring an adit to a desired place.

DIALLING LINES, or DIALLING SCALES. See DIALLING, Index.

DIALLING SECTOR is a sector having upon it, besides other lines, the dialling lines, the construction of which is shown under DIALLING. It is evident that some advantage will be obtained in the practice of dialling by having the line placed on a sector. See SECTOR.

DIALLING SPHERE, is an instrument made of brass, with several semicircles sliding over one another, on a moving horizon, to demonstrate the nature of the doctrine of spherical triangles, and to give a true idea of the drawing of dials on all manner of planes.

DIALLING TRIGON, an instrument invented by Mr. Benjamin Martin, consisting of two graduated scales and a plane, used by some in the practice of dialling.

DI'ALECT, *n. s.* Fr. *dialecte;* Span. *dialecto;* Ital. *dialetto;* Lat. *dialectus;* Gr. διαλεκτος, from δια and λεγω, to speak. Language; style; the mode of expression peculiar to a certain district.

When themselves do practise that whereof they write, they change their *dialect;* and those words they shun, as if there were in them some secret sting.
Hooker.

In her youth
There is a prone and speechless *dialect,*
Such as moves men.
Shakspeare. Measure for Measure.

If the conferring of a kindness did not bind the person upon whom it was conferred to the returns of gratitude, why, in the universal *dialect* of the world, are kindnesses still called obligations? *South.*

The Tuscan language is greatly admired for its elegance, and the meanest inhabitants of Florence speak a *dialect* which the rest of Italy are proud to imitate. *Johnson.*

DIALECT is an appellation given to the language of a province, in so far as it differs from that of the whole kingdom. The term is particularly used in speaking of the ancient Greek, whereof there were four dialects, each of which was a perfect language in its kind, that took place in certain countries. In Great Britain, besides the two dialects of English and Scotch, almost every county has a dialect of its own, all differing considerably in pronunciation, accent, and tone, although one and the same language.

DIALECTICS, in the literary history of the ancients, that branch of logic which taught the rules and modes of reasoning. See LOGIC. Zeno Eleates was the first who discovered the natural series of principles and conclusions observed in reasoning, and formed an art thereof in form of a dialogue; which, for this reason, was called dialectica. The dialectica of the ancients is usually divided into several kinds: The first was the eleatica, that of Zeno Eleates, which was threefold; viz. consecutionum, colloqutionum, and contentionum. The first consisting of rules for deducing or drawing conclusions. The second, the art of dialogue; which became of such universal use in philosophy, that all reasoning was called interrogation: then, syllogism being laid aside, the philosophers used dialogue, and required the respondent to conclude and argue from the several concessions made. The last part of Zeno's dialectics, ερισικη, was contentious, or the art of disputing and contradicting; though some, particularly Laertius, ascribe this part to Protagoras a disciple of Zeno.

The second is the dialectica megarica, whose author is Euclid, as of Megara. He gave much

into the method of Zeno and Protagoras; though there are two things appropriated to him: the first, that he impugned the demonstrations of others, not by assumptions, but conclusions; continually making illations, and proceeding from consequence to consequence: the second, that he set aside all arguments drawn from comparisons of similitude as invalid. He was succeeded by Eubulides, from whom the sophistic way of reasoning is said to be derived. In his time the art is described as manifold: mentiens, fallens, electra, obvelata, arcevalis, cornuta, and calva. See SOPHISM.

The third is the dialectica of Plato, which he proposes as a kind of analysis to direct the human mind, by dividing, defining, and bringing things to the first truth; where being arrived, it applies itself to explain sensible things, but with a view to return to the first truth where alone it can rest. Such is the idea of Plato's analysis.

The fourth is Aristotle's dialectica: containing the doctrine of simple words, delivered in his book of Prædicaments; the doctrine of propositions, in his book De Interpretatione; and that of the several kinds of syllogism, in his books of Analytics, Topics, and Elenchuses.

The fifth is the dialectica of the Stoics; which they call a part of philosophy, dividing it into rhetoric and dialectic; to which some add the definitive, whereby things are justly defined; comprehending likewise the canons or criterions of truth. The Stoics, before they treat of syllogisms, have two principal places; the one about the signification of words, the other about the things signified. On occasion of the first, they consider abundance of things belonging to the grammarian's province: what, and how many letters; what is a word, diction, speech, &c. On occasion of the latter, they consider things themselves, not as without the mind, but as in it, received in it by means of the senses. Accordingly, they first teach, that nil sit in intellectu, quod non prius fuerit in sensu; 'whatever is in the mind came thither by the senses;' and that aut incursione sui, as Plato, who meets the sight; aut similitudine, as Cæsar by his effigy; aut proportione, either by enlarging as a giant, or by diminishing as a pygmy; aut translatione, as a Cyclops; aut compositione, as a Centaur; aut contrario, as death; aut privatione, as a blind man.

The sixth is Epicurus's dialectica: who had recourse to certain canons, the collection whereof he called Canonica; and as all questions in philosophy are either de re or de voce, he gave separate rules for each.

DIALECTICK, *n. s.* Διαλεκτικη. Logic; the art of reasoning. See DIALECT.

DIALECTICAL, *adj.* Logical; argumentative.

Those *dialectical* subtleties, that the schoolmen employ about physiological mysteries, more declare the wit of him that uses them, than increase the knowledge of sober lovers of truth. *Boyle.*

DIALITHA, in the writings of the ancients, a word used to express the elegant ornaments of the Greeks and Romans, composed of gold and gems. They also called these lithocolla, cemented stones or gems; the gold being in this case as a cement to hold the stones together. They wore bracelets and other ornaments about their dress: and their cups and table-furniture were of the same kind. The green stones were found to succeed best, and the emerald and chrysolite were most in esteem for this purpose. Pliny says of them: 'Nihil jucundius aurum decet,' 'Nothing becomes gold better.'

DIAL'OGIST, *n. s.* } Gr. διαλογος; δια
DI'ALOGUE, *n. s.* & *v. n.* } and λογος, a word. A speaker in a conference; a conference or conversation between two or more persons. To hold a conference.

Will you hear the *dialogue* that the two learned men have compiled in praise of the owl and cuckow? *Shakspeare.*

Dost *dialogue* with thy shadow? *Id. Timon.*

In easy *dialogues* is Fletcher's praise;
He moved the mind, but had not power to raise. *Dryden.*

With the stars
And the quick Spirit of the Universe
He held his *dialogues*; and they did teach
To him the magic of their mysteries. *Byron.*

DIALYSIS, in grammar, a mark or character, consisting of two points (··) placed over two vowels, because otherwise they would make a diphthong, as Mosäic, Phäeton, &c.

DIAMASTIGOSIS, a festival of Sparta, in honor of Diana Orthia, which received that name απο του μαστιγουν, from whipping, because boys were whipped before the altar of the goddess. These boys, called Bomonicæ, were originally free-born Spartans, but in the more delicate ages they were of mean birth, and generally of a slavish origin. This operation was performed by an officer in a severe and unfeeling manner; and that no compassion should be raised, the priest stood near the altar with a small light statue of the goddess, which suddenly became heavy and insupportable if the lash of the whip was less rigorous. The parents of the children attended the solemnity, and exhorted them not to show themselves, either by fear or groans, unworthy of Laconian education. These flagellations were so severe, that the blood gushed in profuse torrents, and many expired under the lash of the whip, without uttering a groan, or betraying any marks of fear. Such a death was reckoned very honorable, and the corpse was buried with much solemnity with a garland of flowers on its head. The origin of this festival is unknown. Some suppose that Lycurgus first instituted it to inure the youth of Lacedemon to bear labor and fatigue, and render them insensible to pain and wounds. Others maintain, that it is a mitigation of an oracle, which ordered that human blood should be shed on Diana's altar; and according to their opinion, Orestes first introduced that barbarous custom, after he had brought the statue of Diana Taurica into Greece. There is another tradition which mentions that Pausanias, as he was offering prayers and sacrifices to the gods, before he engaged with Mardonius, was suddenly attacked by a number of Lydians who disturbed the sacrifice, and were at last repelled with staves and stones, the only weapons with which the Lacedemonians were provided at that

moment. In commemoration of this, therefore, the whipping of boys was instituted at Sparta, and after that the Lydian procession.

DIAM'ETER, *n. s.* DIAM'ETRAL, *adj.* DIAM'ETRALLY, *adv.* DIAMET'RICAL, *adj.* DIAMET'RICALLY, *adv.* Gr. *διά* and *μετρον*, a measure. The line which, passing through the centre of a circle, or other curvilinear figure, divides it into equal parts. Diametral and diametrical is describing or relating to a diameter; also, in a figurative sense, directly opposite; or perhaps, to the greatest length opposed, as are the points of a circumference touched by the ends of a diameter. Diametrally and diametrically are also synonymous.

The space between the earth and the moon, according to Ptolemy, is seventeen times the *diameter* of the earth, which makes, in a gross account, about one hundred and twenty thousand miles. *Raleigh.*

He made an instrument to know
If the Moon shine full or no.
—— Tell what her *diameter* to an inch is,
And prove that she's not made of green cheese.
Hudibras.

He persuaded the king to consent to what was *diametrically* against his conscience and his honour, and, in truth, his security. *Clarendon.*

Christian piety is, beyond all other things, *diametrally* opposed to profaneness and impiety of actions. *Hammond.*

Thus intercepted in its passage, the vapour, which cannot penetrate the stratum *diametrically*, glides along the lower surface of it, permeating the horizontal interval, which is betwixt the said dense stratum and that which lies underneath it. *Woodward.*

That the longer *diameter* of an ellipsis may be shortened, till it shall differ little from a circle, is indisputably true. *Johnson.*

DIAMETER. The line, which passing through the centre of a circle, or other curvilinear figure, divides it into equal parts. The impossibility of expressing the exact proportion of the diameter of a circle to a circumference, by any received way of notation, and the absolute necessity of bringing it as near the truth as possible, has induced some of the most celebrated men in all ages to endeavour to approximate it. The first who attempted it with success was the celebrated Van Cuelen, a Dutchman, who, by the ancient very laborious method, carried it to thirty-six decimal places; these he ordered to be engraven on his tomb-stone, thinking he had set bounds to improvement. However, the indefatigable Abraham Sharp carried it to seventy-five places in decimals; and since that time it has been carried much further.

DI'AMOND, *n. s.* DI'AMONDED, *adj.* Fr. and Dut. *diamant*; Ital. Span. and Port. *diamante*; Teut. *demant*, from Lat. *adamas, adamantis*; Gr. *αδαμας, αδαμαντος*, i. e. *α* privative, and *δαμαζω* to subdue, because too hard to break or mould into shape. See the article below. A precious stone. Diamonded is, shaped like a diamond.

I see how thine eye would emulate the *diamond*: thou hast the right arch bent of the brow. *Shakspeare.*

Lop a bough of a tree, and one shall behold the grain thereof (by some seret cause in nature) *diamonded* or streaked in the fashion of a lozenge. *Fuller.*

Certainly the price and virtue of things consist not in the quantity: one *diamond* is more worth than many quarries of stone. *Bp. Hall. Contemplations.*

The *diamond* is by mighty monarchs worn,
Fair as the star that ushers in the morn.
Blackmore.

The lively *diamond* drinks thy purest rays,
Collected light, compact. *Thomson.*

Shakspeare opens a mine which contains gold and *diamonds* in inexhaustible plenty, though clouded by incrustations, debased by impurities, and mingled with a mass of meaner minerals. *Johnson.*

The DIAMOND is a genus of siliceous earths, called adamas gemma by the Latins, demant by the Germans and Swedes, and diamant by the French, and is the hardest of all stones hitherto discovered. See ADAMAS. It was thought by the ancients that the diamond became soft and malleable, by steeping it in hot goat's-blood. Diamonds are found only in the East Indies, and in Brasil in South America. The diamond mines are in GOLCONDA, VISAPOUR, BENGAL, and the island of BORNEO. See these articles. In the mines of Golconda are found a great number of stones from ten to forty carats, and upwards; and it was here that the famous diamond of Aurengzebe, the great mogul, was found, which before it was cut weighed 793 carats. The stones of this mine are not very clear; their water is usually tinged with the quality of the soil: being black where that is marshy; red where it partakes of red; and sometimes green and yellow, where the ground is of these colors. Another defect is a kind of greasiness appearing on the diamond, when cut, which takes off part of its lustre. There are usually not fewer than 60,000 persons, men, women, and children, at work in this mine. When the miners have found a place where they intend to dig, they level another somewhat bigger near it, and enclose it with walls about two feet high, leaving apertures from space to space, to give passage to the water. They dig twelve or fourteen feet deep, and till they find water. Then they cease, and the water thus found serves to wash the earth two or three times, after which it is let out at an aperture reserved for that purpose. This earth being well washed and dried, they sift it in a kind of open sieve, as we do corn; then thresh it, and sift it afresh; and lastly, search it well with the hands to find the diamonds. The miners work naked, except that they have a thin linen cloth before them. They have also inspectors, to prevent their concealing diamonds; which, however, they frequently do, by swallowing them when not observed.

Diamonds are commonly clear and pellucid, yet some are met with of a rose color, or inclining to green, blue, or black, and some have black specks. Tavernier saw one in the treasury of the mogul, with black specks in it, weighing about fifty-six carats; and he informs us, that yellow and black diamonds are produced in the mines at Carnatica. Mr. Dutens also relates, that he saw a black diamond at Vienna in the collection of the prince de Lichtenstein. Some

diamonds have a greenish crust; and of these M. Tavernier relates, that they burst into pieces while working into a proper shape, or in the very act of polishing on the wheel. In confirmation of this, he mentions a large diamond worth upwards of £5000 sterling, which burst into nine pieces while polishing on the wheel at Venice. The finest diamonds are those of a color like pure water, of a regular form, and free from stains, spots, specks, flaws, and cross veins. Diamonds, tinctured yellow, blue, green, or red, in a high degree, are next in esteem; but if they are tinctured with these colors only in a low degree, the value is greatly diminished. There are also diamonds of a brown, and some of a dark hue; the first resembling the brownest sugar-candy, and the latter dusky iron. In the Philosophical Commerce of Arts, Dr. Lewis tells us of a black diamond that he himself had seen. At a distance it looked uniformly black, but on closer examination appeared in some parts transparent, and in others charged with foulness, on which the black hue depended. These gems are lamellated, consisting of very thin plates like talc, but very closely united, the direction of which must be found out by lapidaries before they can work them properly. Such as have their foliated substance not in a flat position, are called by the workmen diamonds of nature.

The first water in diamonds means the greatest purity and perfection of their complexion, which ought to be that of the purest water. When diamonds fall short of this perfection, they are said to be of the second or third water, &c., till the stone may be properly called a colored one: for it would be an impropriety to speak of an imperfectly colored diamond, or one that has other defects, as a stone of a bad water only.

Diamond is so hard, that it can only be cut and ground by itself and its own substance. To bring it to that perfection which augments its price so considerably, they begin by rubbing several against each other while rough, after having fixed them to the ends of two wooden blocks, thick enough to be held in the hand, with a mixture of rosin and brick dust. It is this powder, thus rubbed off, and received in a little box for that purpose, that serves to grind and polish the diamonds. This is done by a mill, which turns a wheel of soft iron, sprinkled over with diamond dust mixed with oil of olives. The same dust, well ground, and diluted with water and vinegar, is used in the sawing of diamonds, which is performed with an iron or brass wire as fine as a hair. Sometimes, in lieu of sawing, they cleave them, especially if there be any large shivers therein. But the Europeans are not usually daring or expert enough to run the risk of cleaving, for fear of breaking.

1. The greatest diamond ever known belongs to the king of Portugal, and was found in Brasil. It is still uncut; and Mr. Magellan informs us, that it was larger, but a piece was broken off by the ignorant countryman who chanced to find this great gem, and tried its hardness by the stroke of a large hammer upon an anvil. This prodigious diamond weighs 1680 carats; and although it is uncut, Mr. Rome de l'Isle says that it is valued at £224,000,000 sterling, which gives the estimation of 79 36, or about £80 sterling for each carat; viz. for the multiplicand of the square of its whole weight. But even in case of any error of the press in this valuation, if we employ the general rule abovementioned, this great gem must be worth, at least, above £3,500,000 sterling. 2. The famous diamond which adorns the imperial sceptre of Russia under the eagle at the top of it, weighs 779 carats, and is worth at least £4,854,728 sterl., although it hardly cost 135,417 guineas. This diamond was one of the eyes of a Malabarian idol, named Scheringham. A French grenadier, who had deserted from the Indian service, contrived to become one of the priests of that idol, from which he stole one of its eyes; he then ran away to the English at Trichinapeuty, and thence to Madras. A ship's captain bought it for 20,000 rupees; afterwards a Jew gave £17,000 or £18,000 sterling for t: at last a Greek merchant, named Gregory Suffras, offered it to sale at Amsterdam in 1766; and the late prince Orloff purchased it, as he himself told Mr. Magellan in London, for the empress Catharine II. The figure and size of this diamond may be seen in the British Museum in London: it is not of a regular form. 3. The diamond of the great mogul is cut in rose; weighs 279⅞ carats, and is worth 380,000 guineas. This diamond has a small flaw underneath near the bottom; and Tavernier, page 389, who examined it, valued the carat at 150 French livres. Before this diamond was cut it weighed 793⅛ carats, according to Rome de l'Isle; but Tavernier, vol. 2, p. 339, says, that it weighed 900 carats before it was cut. If this is the same diamond, its loss by being cut was very extraordinary. 4. Another diamond of the king of Portugal, which weighs 215 carats, is extremely fine, and is worth at least 369,800 guineas. 5—7. The diamond of the emperor of Germany weighs 139½ carats; and is worth at least 109,520 guineas. Tavernier says, that this diamond has a little hue of a citron color; and he valued it at 135 livres tournoises the carat. Robert de Berquen the grandson of Louis, says, that this diamond was cut into two: that the grand Turk had another of the same size; and that there were at Bisnagar two large diamonds, one of 250 and another of 140 carats. 8. The diamond of the late king of France, called the Pitt or Regent, weighs 136¾ carats: this gem is worth at least 208,333 guineas, although it did not cost above the half of this value. 9. The other diamond of the same monarch, called the Sancy, weighs fifty-five carats: it cost 25,000 guineas; and M. Dutens says, that it is worth much above that price.

For the valuation of diamonds of all weights, Mr. Jefferies lays down the following rules.—He first supposes the value when rough to be £2 per carat, at a medium; then to find the value of diamonds of greater weights, multiply the square of their weight by 2, and the product is the value required. *Example.* To find the value of a rough diamond of two carats, $2 \times 2 = 4$, the square of the weight; which, multiplied by 2 gives £8, the true value of a rough diamond of two carats. For finding the value of manufac-

tured diamonds, he supposes half their weight to be lost in manufacturing them. To find their value, multiply the square of double their weight by 2, which will give their true value in pounds. Thus to find the value of a wrought diamond weighing two carats; we first find the square of double the weight, viz. $4 \times 4 = 16$; then $16 \times 2 = 32$. So that the true value of a wrought diamond of two carats is £32.

The names of *oriental* and *occidental*, given by jewellers to this and all other precious stones, have a different meaning from the obvious sense; the finest and hardest being always called *oriental* whether they be produced in the east or not. Those called *occidental* are of inferior value; but according to Mr. Jefferies, who has written a treatise on the subject, the diamonds of Brasil equal the finest oriental ones. Diamonds are also distinguished according to their figure, by the names of rose diamonds, brilliants, and rough diamonds.

Brilliant diamonds are those cut in faces both at top and bottom; and whose table, or principal face at top, is flat. To make a complete square brilliant, if the rough diamond be not round of a square figure, it must be made so; and if the work be perfectly executed, the length of the axis will be equal to the side of the square base of the pyramid. Jewellers then form the table and collet by dividing the block, or length of the axis, into eighteen parts. They take 5-18ths from the upper part, and 1-18th from the lower. This gives a plane at 4-18ths from the girdle for the table; and a smaller plane at 5-18ths distance for the collet, the breadth of which will be 1-5th of the breadth of the table. In this state the stone is said to be a *complete square table* diamond. The brilliant is an improvement on the table diamond, and, according to Mr. Jefferies, was introduced within the last century. To render a brilliant perfect, each corner of the above described table diamond, must be shortened by 1-20th of its original. The corner ribs of the upper sides must be flattened, or run towards the centre of the table 1-6th less than the sides; the lower part, which terminates in the girdle, must be 1-8th of one side of the girdle; and each corner rib of the under sides must be flattened at the top, to answer the above flattening at the girdle, and at the bottom must be 1-4th of each side of the collet. The parts of the small work, which complete the brilliant, or the star, and skill facets, are of a triangular figure. Both of these partake equally of the depth of the upper sides from the table to the girdle; and meet in the middle of each side of the table and girdle, as also at the corners. Thus they produce regular lozenges on the four upper sides and corners of the stone. The triangular facets, on the under sides, joining to the girdle, must be half as deep again as the above facets, to answer to the collet parts. The stone here described is said to be a *full-substanced brilliant*. If the stone is thicker than in the proportion here mentioned, it is said to be an *over-weighted brilliant*. If the thickness is less than in this proportion, it is called a *spread-brilliant*. The beauty of brilliants is diminished by their being either over-weighted or spread. The true proportion of the axis, or depth of the stone to its side, is as 2 to 3. Brilliants are distinguished into square, round, oval, and drops, from the figure of their respective girdles.

Rose diamonds are quite flat underneath, with their upper part cut in divers little faces, usually triangles, the uppermost of which terminate in a point The depth of the stone from the base to the point must be half the breadth of the diameter of the base of the stone. The diameter of the crown must be 2-5ths of the diameter of the base. The perpendicular, from the base to the crown, must be 3-5ths of the diameter of the stone. The lozenges which appear in all circular rose diamonds, will be equally divided by the ribs that form the crown; and the upper angles or facets will terminate in the extreme point of the stone, and the lower in the base or girdle.

Rough diamonds are the stones, as nature produces them in the mines. They should be chosen uniform, of a good shape, transparent, not quite white, and free of flaws and shivers. Black, rugged, dirty, flawey, veiny stones, and all such as are not fit for cutting, they use to pound in a steel mortar made for that purpose; and when pulverised they serve to saw, cut, and polish the rest. Shivers are occasioned in diamonds by this, that the miners, to get them more easily out of the vein, which winds between two rocks, break the rocks with huge iron levers, which shakes, and fills the stone with cracks and shivers.

It has been proved that diamonds are capable of being dissipated, not only by the collected heat of the sun, but also by the heat of a furnace. Boyle says, that he perceived certain acrid and penetrating exhalations from diamonds exposed to fire. A diamond by exposure to a concave speculum, the diameter of which was forty inches, was reduced to an eighth part of its weight. In the Giornale de Letterriti d'Italia, there is a relation of experiments made on precious stones, by order of the grand duke of Tuscany, with a burning lens, the diameter of which was two-thirds of a Florentine ell, near the focus of which was placed another smaller lens. By these experiments we find, that diamonds were more altered by solar heat than most of the other precious stones, although not the least appearance of a commencing fusion was observable. A diamond weighing thirty grains, thus exposed during thirty seconds, lost its color, lustre, and transparency, and became of an opaque white. In five minutes bubbles appeared on its surface; soon afterwards it burst into pieces, which were dissipated; and the small fragment which remained was capable of being crushed into fine powder by the pressure of the blade of a knife. Neither the addition of glass, flints, sulphur, metals, or salt of tartar prevented this dissipation of diamonds, or occasioned any degree of fusion. By other experiments made by order of the emperor Francis I. we find, that diamonds were entirely dissipated by having been exposed in crucibles to a violent fire of a furnace during twenty-four hours; while rubies by the same heat were not altered in weight, color, or polish. By exposing diamonds during two hours only at a time, the following alterations produced on them by fire were observed. First, they lost their polish

then they were split into thin plates; and, lastly, totally dissipated. By the same fire, emeralds were fused. See Magasin de Hambourg, tom. xviii. The action of fire on diamonds was, notwithstanding the above-mentioned experiments, doubted in France, where numerous experiments have been made. M. D'Arcet, found, not only that diamonds included in porcelain crucibles, closed or covered with perforated lids, and exposed to the long and intense heat of a porcelain furnace, were perfectly dissipated; but also, that these stones could, in a few hours, be totally volatilised with a much inferior degree of heat, by exposing them in a coppel, under the muffle of an assay furnace. In this experiment, he observed that the dissipation was gradual, and that it was effected by a kind of exfoliation. The dissipation of diamonds exposed in coppels was confirmed by M. Macquer, who farther observed, that the diamonds were, before the dissipation began, rendered, by the fire, brilliant and shining, as it were, with a phosphoric light. To determine whether the dissipation of diamonds was effected by their reduction into vapor, or by a combustion or other effect of air upon them, Messrs. Lavoisier, Macquer, and Cadet, exposed diamonds to intense heat in an earthen retort, during several hours, but without any other effect than that their polish was destroyed, and about 1-7th of their weight diminished. M. Mitouard put diamonds in a tobacco-pipe filled with pounded charcoal accurately closed with lute. He further secured the diamonds from access of air or flame, by placing the tobacco-pipe in a crucible, to which another crucible was inverted and carefully luted. The diamonds, thus excluded from external air, having been exposed to the most intense heat which could be excited in a well constructed furnace, were not thereby altered or diminished.

Lavoisier, in a memoir published in 1772, showed that when the diamond is burnt, carbonic acid gas is obtained, and that there is a striking analogy between it and charcoal. In 1785 Guyton Morvau found that the diamond is combustible when dropped into melted nitre; that it burns without leaving any residuum, and in a manner analogous to charcoal. In 1797 Mr. Tennant repeated this experiment with much more precision; and the conclusion he drew from it was, that when a diamond is burnt, the whole of the product is carbonic acid gas; that a given weight of diamond yields just as much carbonic gas as the same weight of charcoal; and that diamond and charcoal are both composed of the very same substance.

Sir Humphry Davy, from the action of potassium on it, and its non-conduction of electricity, suggested in his third Bakerian lecture, that a minute portion of oxygen might exist in it; and in his new experiments on the fluoric compounds he threw out the idea, that it might be the carbonaceous principle, combined with some new, light, and subtle element, of the oxygenous and chlorine class.

This unrivalled chemist, during his residence at Florence in March, 1814, made several experiments on the combustion of the diamond and of plumbago, by means of the great lens in the cabinet of natural history; the same instrument as that employed in the first trials on the action of the solar heat on the diamond, instituted in 1694 by Cosmo III., grand duke of Tuscany. He subsequently made a series of researches on the combustion of different kinds of charcoal at Rome. His mode of investigation was peculiarly elegant, and led to the most decisive results.

From the results of his different experiments, conducted with the most unexceptionable precision, it is demonstrated, that diamond affords no other substance by its combustion than pure carbonic acid gas; and that the process is merely a solution of diamond in oxygen, without any change in the volume of the gas.

Diamond, in the glass trade, an instrument used for squaring the large plates or pieces; and, among glaziers, for cutting their glass. These sorts of diamonds (which are small broken pieces of real diamonds), are differently fitted up. To be used for large pieces, as looking-glasses, &c. they are set in an iron ferrule, about two inches long, and a quarter of an inch in diameter, the cavity of the ferrule being filled up with lead, to keep the diamond firm: there is also a handle of box or ebony fitted to the ferrule, for holding it by. An application of the diamond, of great importance in the art of engraving, has been also made within a few years by the late Wilson Lowry, the eminent engraver, and first inventor of the mechanical methods now used in that part of the process called etching. He applied them to the purpose of drawing or ruling lines, which are afterwards to be deepened by aqua-fortis. Formerly steel points, called etching-needles, were used for that purpose, but they soon became blunt by the friction against the copper.

Diamond, in heraldry, a term used for expressing the black color in the achievements of peerage. Guillim does not approve of blazoning the coats of peers by precious stones, instead of metals and colors; but the English practice allows it. Morgan says the diamond is an emblem of fortitude.

Diamonds, Cornish, a name given by many people to the crystals found in digging the mines of tin in Cornwall.

Diamond Harbour, a harbour in the Ganges, or Hoogly River, about thirty-four miles below Calcutta. The Company's ships are generally unloaded here, and take in their homeward-bound cargoes. The place is unhealthy; and owing to the heavy exhalations the sleeping in it is next to certain death. The country on both sides of the river abounds with tigers. The village is poor; but at Fulta, twelve miles up the river, there is a market and a good inn.

DIANA, the goddess of hunting. According to Cicero, there were three of this name: a daughter of Jupiter and Proserpine, who became mother of Cupid—a daughter of Jupiter and Latona—and a daughter of Upis and Glauce. The second is the most celebrated, and to her the ancients allude She was early averse to marriage, and obtained leave of her father to live in perpetual celibacy, and to preside over the pains of women. To shun the society of

men she devoted herself to hunting, and was always accompanied by a number of chosen virgins, who, like herself, abjured marriage. She is represented with a quiver, attended with dogs, and sometimes drawn in a chariot by two white stags. Sometimes she appears with wings, holding a lion in one hand and a panther in the other, with a chariot drawn by two heifers, or two horses of different colors. She is tall, her face something manly; her legs are bare, well-shaped, and strong, and her feet covered with a buskin. She received many surnames, particularly from the places where her worship was established, and from the functions over which she presided. She was called Lucina, Ilythia, or Juno Pronuba, when invoked by women in child-bed; and Trivia, when worshipped in the cross-ways, where her statues were generally erected. She was supposed to be the same as the moon, and Proserpine or Hecate; hence she was called Triformis; and some of her statues represented her with three heads,—that of a horse, a dog, and a boar. Her powers and functions under these three characters have been expressed in these lines:—

Terret, lustrat, agit, Proserpina, Luna, Diana,
Ina, suprema, feras, sceptro, fulgore, sagitta.

She was also called Agrotera, Orthia, Taurica, Delia, Cynthia, Aricia, &c., and supposed to be the same as the Isis of the Egyptians, whose worship was introduced into Greece with that of Osiris. When Typhon waged war against the gods, Diana metamorphosed herself into a cat to avoid his fury. The most famous of her temples was that of Ephesus. See Ephesus. She was there represented with a great number of breasts, and other symbols of Cybele, or the earth. Though the patroness of chastity, yet she is said to have descended from her dignity to enjoy the company of Endymion, and to have granted favors to Pan and Orion. The inhabitants of Taurica were particularly attached to the worship of this goddess, and offered on her altar all the strangers that were shipwrecked on their coasts. Her temple in Aricia was always served by a priest who had murdered his predecessor; and the Lacedæmonians yearly offered her human victims till the time of Lycurgus, who changed this barbarous custom for the sacrifice of flagellation. See Diamastigosis. The Athenians generally offered her goats; and others a white kid, a boar pig, or an ox. Among plants, the poppy and the dittany were sacred to her. She had oracles in Egypt, Cilicia, and Ephesus.

DIANÆ Fanum, in ancient geography, a promontory of Bithynia; now called Scutari, a citadel, opposite to Constantinople, on the east side of the Bosphorus Thracius.

DIANDRIA, from δις twice, and ανηρ a man, the second class in Linnæus's sexual system, consisting of hermaphrodite plants, which have flowers with two male organs. See Botany.

DIANIUM, in ancient geography, a town in Valentia, famous for a temple of Diana, whence the name; now called Denia.

DIANTHERA, in botany. See Justicia.

DIANTHUS, the clove-gilliflower, carnation, pink, sweet-william, &c., a genus of the digynia order, and decandria class of plants; natural order twenty-second, caryophyllei: cal. cylindrical, and monophyllous, with four scales at the base. There are five petals with narrow heels; the capsule is cylindrical and unilocular. There are many species, but not above four that have much beauty as garden flowers. But each of these furnishes several beautiful varieties: viz.

1. D. barbatus, or bearded dianthus, commonly called sweet-william. This rises with many thick leafy shoots, crowning the root in a cluster close to the ground; garnished with spear-shaped evergreen leaves, from half an inch to two inches broad. The stems are upright and firm, branching erect two or three feet high, having all the branches and main stem crowned by numerous flowers in aggregate clusters of different colors and variegations.

2. D. caryophyllus, clove-gilliflower, including all the varieties of carnation. It rises with many short trailing shoots from the root, garnished with long, very narrow, evergreen leaves; and amidst them upright slender flower-stalks, from one to three feet high, emitting many side shoots, all of which, as well as the main stalk, are terminated by large solitary flowers, having short oval scales to the calyx, and crenated petals. The varieties of this are very numerous, and unlimited in the diversity of flowers.

3. D. Chinensis, Chinese, or Indian pink, is an annual plant, with upright firm flower-stalks, branching erect on every side, a foot or fifteen inches high, having all the branches terminated by solitary flowers of different colors and variegations, appearing from July to November.

4. D. deltoides, or common pink, rises with numerous short leafy shoots, crowning the root, in a tufted head close to the ground, closely garnished with small narrow leaves, and from the ends of the shoots many erect flower-stalks, from about six to fifteen inches high, terminated by solitary flowers of different colors, single and double, and sometimes firmly variegated. This species is perennial, as all the varieties of it commonly cultivated also are.

DI'APASE, or Diapa'son, *n. s.* Gr. δια πασων. A chord including all tones. The first is the old word.

The sweet numbers and melodious measures,
With which I wont the winged words to tie,
And make a tuneful *diapase* of pleasures,
Now being let to run at liberty. *Spenser.*

It discovereth the true coincidence of sounds into *diapasons*, which is the return of the same sound. *Bacon.*

Harsh din
Broke the fair musick that all creatures made
To their great Lord, whose love their motion swayed
In perfect *diapason*, whilst they stood
In first obedience, and their state of good. *Milton.*

From harmony, from heavenly harmony,
This universal frame began;
From harmony to harmony
Through all the compass of the notes it ran,
The *diapason* closing full in man. *Dryden.*

Diapason denotes a chord which includes all tones: it is the same with that we call an eighth, or an octave; because there are but seven tones or notes, and then the eighth is the same again with the first. *Harris*

How musical! when all-devouring Time,
Here sitting on his throne of ruins hoar,
While winds and tempests sweep his various lyre,
How sweet thy *diapason*, Melancholy. *Byron.*

DIAPASON among musical instrument makers, a kind of scale whereby they adjust the pipes of their organs, and cut the holes of their hautboys, flutes, &c., in due proportion for performing the tones, semi-tones, and concords just.

DIAPASON, in music, a musical interval by which most writers on music express the octave of the Greeks.

DIAPASON DIAEX, a kind of compound concord, of which there are two sorts: the greater, which is in the proportion of 10·3; and the lesser, in that of 16·5.

DIAPASON DIAPENTE, a compound consonance in a triple ratio, as 3–9. This interval, says Martianus Capella, consists of nine tones and a semi-tone, nineteen semi-tones, and thirty-eight dieses. It is a symphony made when the voice proceeds from the first to the twelfth sound.

DIAPASON DIATESSARON, a compound concord, founded on the proportion of eight to three. To this interval Martianus Capella allows eight tones and a semi-tone, seventeen semitones, and thirty-four dieses. This is when the voice proceeds from its first to its eleventh sound. The moderns would rather call it the eleventh.

DIAPEDESIS, in medicine, a transudation of the fluids through the sides of the vessels that contain them, occasioned by the blood's becoming too much attenuated, or the pores too open.

DIAPENTE, in ancient music, an interval marking the second of the concords, and with the diatessaron an octave. This is what in modern music is called a fifth.

DI'APER, *n. s.* & *v. a.* Fr. *diapre;* so called from Ypres (D'Ypres), as Denim from Nismes. Linen cloth woven in flowers, and other figures; the finest species of figured linen after damask. Hence, as a verb, to diversify or variegate with flowers, or to imitate diaper.

Not any damsel, which her vaunteth most
In skilful knitting of soft silken twine;
Nor any weaver, which his work doth boast
In *diaper*, in damask, or in lyne,
Might in their diverse cunning ever dare
With this so curious net-work to compare.
Spenser.

For fear the stones her tender foot should wrong,
The ground he strewed with flowers all along,
And *diapered* like the discoloured mead. *Id.*

Let one attend him with a silver bason
Full of rose-water, and bestrewed with flowers;
Another bear the ewer, a third a *diaper*.
Shakspeare.

If you *diaper* upon folds, let your work be broken, and taken, as it were, by the half; for reason tells you, that your fold must cover somewhat unseen.
Peacham on Drawing.

Flora used to cloath our grand-dame earth with a new livery, *diapered* with various flowers and chequered with delightful objects. *Howel's Vocal Forest.*

DIAPHAN'IC, *adj.* } Gr. διαφανεια. Trans-
DIAPH'ANOUS, *adj.* } parency; pellucidness;
DIAPHANE'ITY, *n. s.* } power of transmitting light.

Aristotle calleth light a quality inherent or cleaving to a *diaphanous* body. *Raleigh.*

Air is an element superior, and lighter than water, through whose vast, open, subtile, *diaphanick*, or transparent body, the light, afterwards created, easily transpired. *Id.*

Because the outward coat of the eye ought to be pellucid, to transmit the light, which, if the eyes should always stand open, would be apt to grow dry and shrink, and loose their *diaphancity*; therefore are the eyelids so contrived as often to wink, that they so may, as it were, glaze and varnish them over with the moisture they contain. *Ray.*

DIAPHORE'SIS, in medicine, an elimination of the humors in any part of the body through the pores of the skin. See PERSPIRATION.

DI'APHRAGM, *n. s.* Gr. διαφραγμα. The midriff which divides the upper cavity of the body from the lower. Any division or partition which divides a hollow body.

It consists of a fasciculus of bodies, round, about one sixth of an inch in diameter, hollow, and parted into numerous cells by means of *diaphragms*, thick set throughout the whole length of the body.
Woodward on Fossils.

DIAPHRAGM, or DIAPHRAGMA. See ANATOMY. Plato, as Galen informs us, first called this muscle diaphragm, from the verb διαφραττειν, to separate or be between two.

DIAPHORE'SIS, διαφορησις, in rhetoric, a figure expressing the hesitation or uncertainty of the speaker. It is most naturally placed in the exordium of a discourse. We have an example in Homer, where Ulysses, about to relate his sufferings to Alcinous, begins thus:

Τι πρωτον, τι δ' επειτα, τι δ' υστατιον καταλεξω;

Quid primum, quid deinde, quid postremo alloquar?

DIAPHORET'ICK, *adj.* Gr. διαφορητικος. Sudorific; promoting a diaphoresis or perspiration; causing sweat.

A *diaphoretick* medicine, or a sudorific, is something that will promote sweating. *Watts.*

Diaphoreticks, or promoters of perspiration, help the organs of digestion, because the attenuation of the aliment makes it perspirable. *Arbuthnot.*

DIARBECK, DIARBEKER, or DIARBEKIR, an extensive province of Asiatic Turkey; comprehending, in its greatest extent, Diarbekir, properly so called, Yerak or Chaldea, and Curdistan, which were the ancient countries of Mesopotamia, Chaldea, and Assyria, with Babylon. See KURDISTAN. It is called Diarbeck, and Diarbeker, from the word *dhyar*, a duke or ruler, and *beker*, country. It extends along the banks of the Tigris and Euphrates from N. N. W. to south-east, that is, from Mount Taurus, which divides it from Turcomania on the north, to the inmost recess of the Persian gulf on the south, about 600 miles; and from east to west, that is, from Persia on the east, to Syria and Arabia Deserta on the west, in some places 200, and in others about 300, miles; but in the southern or lower parts not above 150. It extends also from the thirtieth to the thirty-eighth degree of latitude, and lies under part of the fifth and sixth climates, whose longest day is about fourteen hours and a half, and enjoys a good temperature of air, as well as in the greater part of it a rich and fertile soil; although there are some large desert tracts in it. Having a con-

siderable frontier towards Persia, it is well guarded and fortified; but its many ancient cities are at present dwindled into heaps of ruins. Diarbekir, Bagdad, and Mosul, are however considerable places. The rivers Euphrates and Tigris have almost their whole course through this country.

DIARBEKIR, or DIARBECK PROPER, is bounded on the north by Turcomania, on the west by Syria, on the south by part of Arabia Deserta and Yrack Proper, and on the east by Curdistan. It is the same country that is called Padanaram by Moses, signifying fruitful, which it still is in a very high degree, especially on the north side; where it yields corn, wine, oil, and fruits, in great abundance. Christianity flourished here in an eminent manner, till its purity was sullied about the beginning of the sixth century by the heresy of the Jacobites, whose patriarch resided here at a very recent period. It is now a pachalic or government of Turkey, subdivided into twelve districts. The principal towns are Diarbekir, Mosul, Orsa or Edessa, Nisibis, Gezir, Merdin, Zibin, Amadia, and Carasara; all of little note except Diarbekir and Mosul.

DIARBEKIR, DIARBECK, or CARAHMED, the capital of the above district, is situated in a delightful plain, on the banks and near the head of the Tigris, about 155 miles or fifteen caravan days' journey, north-east of Aleppo. A bridge of ten arches over the river is said to have been built by order of Alexander the Great. It is one of the richest and most mercantile cities in all Asiatic Turkey; and was once well fortified, being encompassed with a double wall, the outermost of which was flanked with seventy-two towers; but the whole is now in a very dilapidated state. The streets are narrow, but the houses, being of stone and lofty, look respectable; and it has several stately piazzas or bazaars, well stored with all kinds of merchandise, and twelve magnificent mosques, said to have been formerly Christian churches. The Armenian cathedral is a handsome structure, the roof of which is supported by two rows of pillars; and the whole floor covered by carpets. A very handsome fountain in the court in front throws the water to a considerable height. Extensive manufactures are carried on here in iron, copper, silk, wool, and cotton; but its chief article of trade and manufacture is Turkey leather, of which the sale is immense. It has also a manufacture of fine dyed linen and cotton cloths, which are nearly in the same request. There are many large and convenient inns on both sides of the river, for the caravans that go to and from Persia; and the place is much frequented by pilgrims of all nations and religions. The Turkish ladies are said here to enjoy an extraordinary degree of liberty, and are commonly seen on the walks of the city in company with the Christian women, with whom they live in great friendship. The citizens generally are said to be polite, affable, and courteous. A basha resides here, who has very extensive jurisdiction. He has commonly a body of 20,000 horse under him. The adjacent territory is very rich and picturesque; the bread, wine, flesh, and fruits, excellent. The inhabitants, who consist of Turks, Armenians, Kurds, Catholics, and Jacobites, are computed at 80,000 by Gardanne, at 38,000 by Mr. M'Donald Kinneir; the real number may probably be a medium between the two. Diarbekir is sixty miles from Merdin, 172 from Malatia, and 540 E.S.E. of Constantinople.

DIARRHŒ'A, *n. s.* } Gr. *διαρροια*. A flux.
DIARRHŒ'TICK, *adj.* } productive of frequent stools. The adjective signifies purgative.

In the midst of that service was I surprised with a miserable distemper of body; which ended in a *diarrhœa* biliosa, not without some beginning and further threats of a dysentery; wherewith I was brought so low, that there seemed small hope of my recovery.
Bp. Hall's Account of Himself.

Millet is *diarrhœtick*, cleansing, and useful in diseases of the kidneys. *Arbuthnot.*

During his *diarrhœa* I healed up the fontanels.
Wiseman.

It is certain, that much swimming is the means of stopping a *diarrhœa*, and even of producing a constipation. *Franklin.*

DIARRHŒA, in medicine, an excessive purging, distinguished by frequent stools with the natural excrement, not contagious, and seldom attended with pyrexia. It is a genus of disease in the class neuroses, and order spasmi of Cullen, containing the following species:— 1. Diarrhœa crapulosa. The feculent diarrhœa, from *crapulus*, one who overloads his stomach. 2. Diarrhœa biliosa. The bilious, from an increased secretion of bile. 3. Diarrhœa mucosa. The mucous, from a quantity of slime being voided. 4. Diarrhœa hepatirrhœa. The hepatic, in which there is a quantity of serous matter, somewhat resembling the washings of flesh, voided; the liver being primarily affected. 5. Diarrhœa lienterica. The lientery; when the food passes unchanged. 6. Diarrhœa cœliaca. The cœliac passion: the food passes off in this affection in a white liquid state like chyle. 7. Diarrhœa verminosa Arising from worms.

DI'ARY, *n. s.* Lat. *diarium*. An account of the transactions, accidents, &c. of every day; a journal.

In sea voyages, where there is nothing to be seen but sky and sea, men make *diaries*; but, in land-travel, wherein so much is to be observed, they omit it.
Bacon.

I go on in my intended *diary*. *Tatler.*

DIASTOLE, *n. s.* *Διαστολη*. A figure in rhetoric, by which a short syllable is made long: also, the dilation of the heart.

The systole seems to resemble the forcible bending of a spring, and the *diastole* its flying out again to its natural state. *Ray on the Creation.*

If systole or *diastole* move
Quickest when he's in wrath or love. *Hudibras.*

DI'ASTYLE. *Δια* and *στυλος*, a pillar. A sort of edifice, where the pillars stand at such a distance from one another, that three diameters of their thickness are allowed for intercolumniation. *Harris.*

DIATES'SERON, *n. s.* Of *δια* and *τεσσερα*, four. An interval in music, composed of one greater tone, one lesser, and one greater semitone; its proportion being as four to three. It is called, in musical composition, a perfect fourth. *Harris.*

DIATHESIS, ASTHENIC, is described to be that state of the body, wherein there is 'too little excitement of the whole living system, arising from the debilitating noxious powers, impairing all the functions, disturbing some, giving a false appearance of increasing others, but always debilitating.'

DIATHESIS, STHENIC, is that state of the body, wherein 'all the functions are first increased; a disturbance or irregularity then takes place in some; others are impaired; but not, as long as this diathesis lasts, by a debilitating operation.'

DIATONIC. Of *διατονος*. The ordanary sort of music which proceeds by different tones, either in ascending or descending. It contains only the two greater and lesser tones, and the greater semi-tone. *Harris.*

DIATONIC, in music, is compounded of two Greek words, viz. the preposition *δια*, signifying a transition from one thing to another, and the substantive *τονος*, importing a given degree of tension and musical note. It is indifferently applied to a scale or gamut, to intervals of a certain kind, or to a species of music, whether in melody or harmony, composed of these intervals. We copy the following scale of the Greek diatonics from Dannely's Musical Dictionary:—

28	Nete hyperbolaeon (second space treble clef)	*a*
27	Paranete hyperbolaeon diatonos	*g*
26	Paranete hyperbolaeon chromatice	*g-flat*) or *f-sharp*
25	Paranete hyperbolaeon enarmonios	*f*
24	Trite hyperbolaeon	*e* ×) enhar. *f-flat*
23	Nete diezeugmenon	*e*
22	Paranete diezeugmenon diatonos	*d*
21	Paranete diezeugmenon chromatice	*d-flat*) *c-sharp*
20	Paranete diezeugmenon enarmonios	*c*
19	Trite diezeugmenon	*b* ×) enhar. *c-flat*
18	Paramese (space above bass staff)	*b-natural*
17	Nete synemmenon (the space below the treble staff)	*d*
16	Paranete synemmenon diatonos	*c*
15	Paranete synemmenon chromatice	*c-flat* (*b-natural*)
14	Paranete synemmenon enarmonios	*b-flat*
13	Trite synemmenon	*a* ×) enhar. *b-flat*
12	Mese	*a*
11	Lichanos meson diatonos	*g*
10	Lichanos meson chromatice	*g-flat*) *f-sharp*
9	Lichanos meson enarmonios	*f*
8	Parypate meson	*e* ×) enhar. *f-flat*
7	Hypate meson	*e*
6	Lichanos hypaton diatonos	*d*
5	Lichanos hypaton chromatice	*d-flat* (*c-sharp*)
4	Lichanos hypaton enarmonios	*c*
3	Parypate hypaton	*b* ×) enhar. *c-flat*
2	Hypate hypaton	*b-natural*
1	Proslambanomenos (first space bass)	*a*

DIAUGOPHRAGMIA, in natural history, a genus of fossils of the order of septariæ, whose partitions, or septa, consist of spar with an admixture of crystal. Of this genus there are three species: 1. A red kind, with brownish-yellow partitions; 2. A brownish-yellow kind, with whitish partitions; 3. A bluish-white kind, with straw-colored partitions.

DIAZ (John), a martyr to the frantic zeal of his brother against the protestant religion, was born in the beginning of the sixteenth century, at Cuenza in Spain. He studied theology at Paris, and under the celebrated Calvin at Geneva. He was the companion of Bucer at the Ratisbon conference; and, going soon after to Neuburgh, was visited by his brother and murderer Alphonsus Diaz, an advocate of the court of Rome. This zealot, failing in his endeavour to reclaim him to popery, immediately plotted against his life. He pretended to close his visit and take his departure, but secretly returned at break of day to the apartment of Diaz, with a companion, who affected to be the bearer of a letter. Gaining admission on this pretence, while Diaz was reading the paper presented, Alphonsus's comrade gave him a death-blow on the head with an axe, and fled. This murder took place in March 27th, 1546; and, though the assassins were taken, the emperor Charles V. put a stop to the proceedings against them. The miserable fratricide afterwards hanged himself. An account of his death was composed in Latin, under the title of Historia vera de Morte J. Diazii. It produced a great sensation at the time. J. Diaz was the author of A Summary of the Christian Religion.

DIAZEUTIC TONE. Of *δια* and *ζευγνυμι*. In the ancient Greek music, it disjoined two fourths, one on each side of it; and which, being joined to either, made a fifth. This is, in our musick, from A to B.

They allowed to this *diazeutick* tone, which is our La, Mi, the proportion of nine to eight, as being the unalterable difference of the fifth and fourth. *Harris.*

DIB'BLE, *n. s.* & *v. a.* } Dut. *dipfel*, a
DIB'BLER. } sharp point, Skinner; from *dabble*, Junius; or a corruption of dog-bill, according to Mr. Thomson. A small spade; a pointed instrument with which are made holes for planting or sowing. The verb is of recent introduction.

Through cunning, with *dibble*, rake, mattock, and spade,
By line and by level trim garden is made.
Tusser's Husbandry.

Wheat is generally *dibbled* in October, on land newly broken up from clover-ley a man with an iron *dibble*, about three feet long, in each hand, walking backward and making two rows of holes in each furrow, slice, or flag; they are made about four inches distant from each other and from one to two inches deep. The *dibbler* is followed by two or three women, boys, or girls, who drop two or three grains into each hole. *Dixon's Agriculture.*

DIBDIN (Charles), a celebrated writer of songs and musical composer, was the son of a silversmith of Southampton, where he was born about the year 1745. He was intended for the church, and received his early education at Winchester school. At the age of fourteen, however, he became a candidate for the situation of organist in a Hampshire village, and, relinquishing all views of entering the church, came at the invitation of an elder brother, a captain in the West India trade, to London. Here he was first engaged in composing ballads, and tuning pianofortes. He made his first appearance as a performer in 1762, at the Richmond theatre, and two years afterwards appeared on the London stage, as Ralph in The Maid of the Mill. The chief part of the music to Lionel and Clarissa, and the whole of that to the musical entertainment of The Padlock, now established his fame as a composer for the drama, which he rapidly increased. The most celebrated of his pieces, perhaps, are The Deserter, The Waterman (the dialogue of which is also his production), and the Quaker, which appeared between 1772 and 1775. Mr. Dibdin never shone as an actor; and, having quarelled with Garrick and some other proprietors of the London theatres, he quitted the stage altogether, and made a successful attempt to entertain the public by accompanying himself, in his own songs, on the piano-forte. His saloon was near Leicester square, and known by the title of Sans Souci. His songs and entertainments produced at this time are said to have exceeded 1200. His sea songs are considered very superior: witness the immense popularity of his Tom Bowling, Poor Jack, &c. The former is said to have been a tribute of affection to the memory of his brother. Imprudence, however, always kept Dibdin poor; and, though assisted by government and many opulent individuals, he died in indigent circumstances in 1814. An edition of his best songs has been published by Dr. Kitchiner.

DIBRA, a town of European Turkey, in Macedonia, near Albania. It was besieged by the Turks in 1442, who conveyed a dead dog into the only spring that supplied the town with water, which compelled the inhabitants to surrender. It is thirty miles north of Akrida.

DIB'STONE, *n. s.* A little stone which children throw at another stone.

I have seen little girls exercise whole hours together, and take abundance of pains, to be expert at *dibstones*.
Locke

DICAC'ITY, *n. s.* Lat. *dicacitas*. Pertness; sauciness.

DICÆARCHUS, a scholar of Aristotle, who composed a great number of books which were valued highly by Cicero and Atticus. He wrote a work to prove that men suffer more mischief from one another than from all evils beside. Another work he composed, concerning the republic of Lacedæmon, was read every year before the youth in the assembly of the ephori. Geography was one of his principal studies, on which science there is a fragment of a treatise of his still extant, and preserved among the Veteris Geographiæ Scriptores Minores.

DICE, *n. s.* & *v. n.* } The plural of die
DI'CER, *n. s.* } See DIE. To dice is to
DICE'BOX. } play with dice, or gamble. A dicer; a gamester.

In prison! certes nay, but in paradise;
Wel hath Fortune yturned thee the *dise*
That h'ath the sight of her, and I the absence.
Chaucer's Canterbury Tales.

They make marriage vows
As false as *dicers'* oaths. *Shakspeare. Hamlet.*

I was virtuously given as a gentleman need to be; virtuous enough; swore little; *diced* not above seven times a week. *Shakspeare Henry IV.*

It is above a hundred to one against any particular throw, that you do not cast any given set of faces with four cubical *dice*, because there are so many several combinations of the six faces of four *dice*. *Bentley.*

I look upon every man as a suicide from the moment he takes the *dicebox* desperately in his hand; and all that follows in his career from that fatal time is only sharpening the dagger before he strikes it to his heart.
Cumberland.

DICE, among gamesters, cubical pieces of bone or ivory, marked with dots on each side of their faces, from one to six. Sharpers have several ways of falsifying dice: by drilling and loading them with quicksilver; by filing and rounding them, &c.

The dice box is a narrow deep cornet, channelled within. It answers to what the Romans called fritillus; whence, crepitantes fritilli: and, in Seneca, resonante fritillo. Besides the fritillus, the Romans, for greater security, had another kind of dice-box called pyrgus, πυργος, and sometimes turricula. It was placed immoveable in the middle of the table, being open at both ends, and likewise channelled within; over the top was placed a kind of funnel, into which the dice were cast out upon the fritillus; whence descending, they fell through the bottom on the table; by which all practising on them with the fingers was effectually prevented. For want of some contrivance of this kind, our sharpers have opportunities of playing a variety of tricks with the box.

DICH. This word seems corrupted, says Dr. Johnson from *dit* for *do it*.

Rich men sin, and I eat root:
Much *ood dich* thy good heart, Apemantus.
Shakspeare. Timon.

DICHOT'OMY, *n. s.* Διχοτομια. Distribution of ideas by pairs.

Some persons have disturbed the order of nature, and abused their readers by an affectation of *dichotomies*, trichotomies, sevens, twelves, &c. *Watts.*

DICHOTOMY, a term used by astronomers for that appearance on the moon, wherein she is

bisected, or shows just half her disk. In this situation the moon is said to be in a quadrate aspect, or to be in her quadrature.

DICK'ENS. A kind of adverbial exclamation, importing, as it seems, much the same with the devil. Belg. *dicker*.

Where had you this pretty weathercock!
I cannot tell what the *dickens* his name is my husband had him of. *Shaks. Merry Wives of Windsor.*

What a *dickens* does he mean by a trivial sum?
But ha'n't you found it, Sir?
Congreve. Old Bachelor.

DICKINSON (Edmund), a celebrated English physician and chemist, born in 1624. He studied and took his degrees at Merton College, Oxford; and, in 1655, published there his Delphi Phœnicizantes, &c., a learned piece, in which he attempted to prove, that the Greeks borrowed the story of the Pythian Apollo, and all that rendered the oracle at Delphi famous, from the Holy Scriptures, and from the book of Joshua in particular. He practised physic first at Oxford; but, removing to London in 1684, and restoring the earl of Arlington from a dangerous illness, he was promoted to be physician in ordinary to Charles II.; and continued in his appointments by his successor. After the Revolution, being afflicted with the stone, he retired from practice, and died in 1707. He published Physica Vetus et Vera, &c., containing a system of philosophy chiefly framed on principles collected from the Mosaic history.

DICTAMNUS, white dittany, or fraxinella, a genus of the monogynia order and decandria class of plants; natural order twenty-sixth, multisiliquæ: CAL. pentaphyllous; the petals are five, and patulous; the filaments sprinkled with glandulous points, the capsules five, coalited. There is only one species. It has thick, penetrating, perennial roots, collected into a head at top, sending up erect stalks annually two or three feet high, garnished with pinnated alternate leaves, of three or four pair of oblong stiff lobes, terminated by an odd one; and the stalks crowned by long pyramidal loose spikes of flowers, of white, red, and purple colors. They are very ornamental plants, and succeed in any of the common borders. The dittany which grows in Crete, Dalmatia, and the Morea, formerly constituted an article in the materia medica. The leaves in smell and taste somewhat resemble lemon thyme, but have more of an aromatic flavor, as well as a greater degree of pungency; when fresh, they yield a considerable quantity of essential oil.

DICTATE, *v. a.* & *n. s.*
DICTA'TION, *n. s.*
DICTA'TOR,
DICTATO'RIAL, *adj.*
DICTA'TORSHIP, *n. s.*
} Fr. *dicter*; Ital. *dettare*; Lat. *dictare*; from *dico*, *à* Gr. δεικω, to show; Chald. דק, to see; to speak. To declare or prescribe with authority. As a substantive, dictate is the rule or maxim laid down; dictation, the act of dictating; dictator, one who delivers rules or orders; and particularly a Roman magistrate invested with absolute authority in certain exigencies. The other derivatives follow these meanings.

This is the solemnest title they can confer under the princedom, being indeed a kind of *dictatorship*. *Wotton.*

Unanimous they all commit the care
And management of this main enterprise
To him their great *dictator*. *Milton.*

He that was fetched from the plough to be made *dictator*, had not half his (a clown's) pride and insolence. *Butler.*

Kind *dictators* made, when they came home,
Their vanquished foes free citizens of Rome.
Waller.

This is that perpetual *dictatorship* which is exercised by Lucretius, though often in the wrong. *Dryden.*

Those right helps of art, which will scarce be found by those who servilely confine themselves to the *dictates* of others. *Locke.*

Then let this *dictate* of my love prevail.
Pope's Od.

That riches, honours, and outward splendour, should set up persons for *dictators* to all the rest of mankind, is a most shameful invasion of the right of our understanding. *Watts.*

Judgment, like other faculties, is improved by practice, and its advancement is hindered by submission to *dictatorial* decisions, as the memory grows torpid by the use of a table-book. *Johnson.*

Thou, who with thy frown
Annihilated senates—Roman, too
With all thy vices, for thou didst lay down
With an atoning smile a more than earthly crown—
The *dictatorial* wreath,—couldst thou divine
To what would one day dwindle that which made
Thee more than mortal? *Byron.*

A DICTATOR was first chosen during the Roman wars against the Latins. The consuls being unable to raise forces for the defence of the state, because the plebeians refused to enlist if they were not discharged from all the debts they had contracted with the patricians, the senate found it necessary to elect a new magistrate with absolute and uncontrolable power to take care of the state. The dictator remained in office for six months, after which he was again elected, if the affairs of the state seemed to be desperate; but if tranquillity was re-established, he generally laid down his power before the time was expired. He knew no superior in the republic, and even the laws were subjected to him. He was called dictator, quoniam dictis ejus parebat populus, because the people implicitly obeyed his command. He was named by the consul in the night viva voce, and his election was confirmed by the auguries. As his power was absolute, he could proclaim war, levy forces, conduct them against an enemy, and disband them at pleasure. He punished as he pleased, and from his decision there lay no appeal, at least till later times. He was preceded by twenty-four lictors with the fasces; during his administration, all other officers, except the tribunes of the people, were suspended, and he was the master of the republic. But amidst all this independence, he was not permitted to go beyond the borders of Italy; he was always obliged to march on foot in his expeditions, and he never could ride in difficult and laborious marches, without previously obtaining a formal leave from the people. He was chosen only when the state was in imminent danger from foreign enemies, or

intestine seditions. In the time of a pestilence, a dictator was sometimes elected; as also to hold the comitia, or to celebrate the public festivals, or drive a nail in the capitol; by which superstitious ceremony the Romans believed that a plague could be averted, or the progress of an enemy stopped. This office, so respectable and illustrious in the first ages of the republic, became odious by the perpetual usurpations of Sylla and Cæsar; and after the death of the latter, the Roman senate passed a decree which for ever forbade a dictator to exist in Rome. The dictator, as soon as elected, chose a subordinate officer, called his magister equitum, master of horse. This officer could do nothing without his express order. This subordination, however, was some time after removed; and during the second Punic war, the master of the horse was invested with a power equal to that of the dictator. A second dictator was also chosen for the election of magistrates at Rome after the battle of Cannæ. The dictatorship was originally confined to the patricians; but the plebeians were afterwards admitted to share it. Titus Lartius Flavus was the first dictator, A.U.C. 253. The institution has been revived in South America, in modern times, in the person of the illustrious Bolivar.

DI'CTION, *n. s.* Fr. *diction;* Lat. *dictio.* Style; language; expression.

There appears in every part of his *diction*, or expression, a kind of noble and bold purity. *Dryden.*

We are refined! and plain manners, plain dress, and plain *diction*, would as little do in life, as acorns, herbage, and the water of the neighbouring spring, would do at table. *Chesterfield.*

DIC'TIONARY, *n. s.* Fr. *dictionaire;* Span. *dictionario;* Ital. *dittionario;* Lat. *dictionarium*, from *dictio*, *dico*, to speak. See DICTION. A book containing the words of a language, with their explanations; a lexicon; a nomenclature of words or things.

Some have delivered the polity of spirits, and left an account that they stand in awe of charms, spells, and conjurations; that they are afraid of letters and characters, notes and dashes, which, set together, do signify nothing; and not only in the *dictionary* of man, but in the subtler vocabulary of Satan. *Browne's Vulgar Errours.*

Is it such a fault to translate simulacra images? I see what a good thing it is to have a good catholick *dictionary*. *Stillingfleet.*

An army, or a parliament, is a collection of men; a *dictionary*, or nomenclature, is a collection of words. *Watts.*

It is not enough that a *dictionary* delights the critick, unless, at the same time, it instructs the learner. *Johnson. Plan of Dictionary.*

DICTYNNIA, in antiquity, feasts celebrated at Lacedæmon and in Crete, in honor of Diana, or of a nymph taken for her, who, having plunged herself into the sea, to escape the passion of Minos, was caught in fishermen's nets, δικτυα, whence the name.

DICTYS, a very ancient Cretan historian, who, serving under Idomeneus in the Trojan war, wrote the history of that expedition. Tzetzes tells us that Homer formed his Iliad upon the plan of that history. The Latin history of Dictys, which has come down to us, is spurious.

DIDAC'TICAL, *adj.* } Gr. διδακτικος. Pre-
DIDAC'TICK. } ceptive; giving precepts: thus a didactic poem is a poem that gives rules for some art; as the Georgics

The means used to this purpose are partly *didactical*, and partly protreptical; demonstrating the truth of the gospel, and then urging the professors of those truths to be stedfast in the faith, and to beware of infidelity. *Ward on Infidelity.*

But what shall I say to Junius, the grave, the solemn, the *didactic!* *Horne Tooke.*

DID'APPER, *n. s.* From dip. A bird that dives into the water.

DIDASCAL'ICK, *adj.* Greek, διδασκαλικος. Preceptive; didactic; giving precepts in some art.

I found it necessary to form some story, and give a kind of body to the poem: under what species it may be comprehended, whether *didascalick* or heroick, I leave to the judgment of the criticks. *Prior.*

DID'DER, *v. a.* Teut. *diddern;* Ger. *zittern.* To quake with cold; to shiver. 'A provincial word,' says Skinner.

DIDELPHIS, in zoology, the opossum; a genus of quadrupeds belonging to the order of feræ, the characters of which are these:—They have ten fore-teeth in the upper jaw, and eight in the under one. The dog-teeth are long; the tongue is somewhat ciliated; and they have a pocket formed by a duplicature of the skin of the belly, in which the dugs are included. Kerr enumerates nineteen species; the chief are:—1. D. brachyura, the short-tailed opossum of Pennant, of a red color, has naked ears, and a short hairy tail, thick at the base, and gradually lessening to the extremity. The body is from three to five inches and a half long. The fur is very soft and glossy, and there is a beautiful red streak along the sides of the head and body. This species inhabits the woods of South America. The female has from nine to twelve young at a birth, which adhere to her teats as soon as born, and she has no pouch. This species agrees with the Murina, in the general form of the body. 2. D. cancrivora, the crab-eater of Buffon, or the Cayenne opossum, has a long slender face; ears erect, pointed, and short: the coat woolly, mixed with very coarse hairs, three inches long, of a dirty white from the roots to the middle; from thence to the ends, of a deep brown; sides and belly of a pale yellow; legs of a dusky brown; thumb on each foot distinct; on the toes of the fore-feet, and thumb of the hind, are nails, very long, taper, naked, and scaly. Length seventeen French inches; of the tail fifteen and a half. The subject measured was young. It inhabits Cayenne; is very active in climbing trees, on which it lives the whole day. In marshy places it feeds on crabs, which, when it cannot draw out of their holes with its feet, hooks them by means of its long tail. If the crab pinches its tail, the animal sets up a loud cry, resembling the human voice, which may be heard afar; but its common voice is a grunt like a young pig. It is well furnished with teeth, and will defend itself stoutly against dogs; brings forth four or five young, which it secures in some hollow tree. The natives eat

these animals, and say their flesh resembles a hare. They are easily tamed, and will then refuse no kind of food. 3. D. cayopollin, the Mexican opossum of Buffon and Pennant, is of an ash color on the head and upper parts of the body: the belly and legs are whitish: the tail is long and pretty thick, varied with brown and yellow; it is hairy near an inch from its origin, the rest naked: the length of the animal from nose to tail, about seven inches and a half; of the tail, more than eleven. It inhabits the mountains of Mexico, and lives in trees, where it brings forth its young: when in any fright, they embrace the parent closely. Her belly has no pouch. The tail is prehensile, and serves instead of a hand. 4. D. gigantea, the kangaroo. This animal has a small head, neck, and shoulders; the body increasing in thickness to the rump. The head is oblong, formed like that of a fan, and tapering from the eyes to the nose; end of the nose naked black; the upper lip divided. The nostrils are wide and open; the lower jaw is shorter than the upper; and the aperture of the mouth small: there are whiskers on both jaws, those on the upper longest; and strong hairs above and below the eyes. The eyes are not large; the irides are dusky; the pupil is of a bluish black. The ears are erect, oblongly ovated, rounded at the ends, and thin, covered with short hairs, four inches long. There are no canine teeth, but six broad cutting teeth in the upper jaw; two long lanceolated teeth in the lower, pointing forward; and four grinding teeth in each jaw, remote from the others. The belly is convex and great. The fore legs are very short, scarcely reaching to the nose, and useless for walking. The hind legs are almost as long as the body, and the thighs are very thick: on the fore feet are five toes, with long conic and strong claws; on the hind feet only three; the middle toe is very long and thick, like that of an ostrich; the two others are placed very distinct from it, and are small; the claws are short, thick, and blunt: the bottom of the feet, and hind part, black, naked, and tuberculated, as the animal rests often on them. The tail is very long, extending as far as the ears; thick at the base, tapering to a point. The scrotum is large and pendulous. The hair on the whole animal is soft, and of an ash color. lightest on the lower parts. It inhabits the western side of New Holland, and has as yet been discovered in no other part of the world. It lurks among the grass, and feeds on vegetables; it goes entirely on its hind legs, making use of the fore feet only for digging, or bringing its food to its mouth. The dung is like that of a deer. It is very timid; at the sight of men it flies from them by amazing leaps, springing over bushes seven or eight feet high, and going progressively from rock to rock. It carries its tail quite at right angles with its body when it is in motion; and when it alights, often looks back. 5. D. murina, the murine opossum, has the face and upper parts of the body of a tawny color; the belly of a yellowish white: the tail is slender, and covered with minute scales to the very rump: the length of the animal from nose to tail, about six inches and a half; the tail of the same length; the female wants the false belly of the last; but on the lower part the skin forms on each side a fold, between which the teats are lodged. It inhabits the hot parts of South America; agrees with the others in its food, manners, and the prehensile power of its tail. Count de Buffon, from inspection, says the female has fourteen teats, and brings from ten to fourteen young ones at a time; they affix themselves to the teats as soon as they are born, and remain attached like inanimate things, till they attain growth and vigor to shift a little for themselves. 6. D. opossum, the sarigue of Buffon, or Molucca opossum of Pennant, has long, oval, and naked ears: the mouth is very wide; the lower side of the upper jaw, throat, and belly, is of a whitish ash color; the rest of the hair a cinereous brown, tipt with tawny, darkest on the back: the tail is as long as the body; near the base covered with hair; the rest naked; the claws are hooked. On the belly of the female is a pouch, in which the young shelter. Marcgrave found six young within the pouch. It has ten cutting teeth above, and eight below. Over each eye is an oblong white spot. The length of the animal from nose to tail is ten inches; and the tail exceeds the length of the head and body. Its whole figure is of a slender and elegant make. This species is found in great numbers in Aroe and Solor. It is called in the Indies pelandor Aroe, or the Aroe rabbit. They are reckoned very delicate eating, and are very common at the tables of the great, who rear the young in the same places in which they keep their rabbits. It inhabits also Surinam, and the hot parts of America. 7. D. tridactyla, Phillip's opossum, or the kangaroo rat, is described as similar, both in the general shape of the body and the conformation of the legs, to the kangaroo; but the visage having a strong resemblance to that of the rat, and the color of the whole not ill resembling that animal, it has obtained the name of the kangaroo rat. It is an inhabitant of New Holland; and two of the species were seen alive at the exhibition of animals over Exeter 'Change in 1790, where one of them brought forth young. This species has two cutting teeth in front of the upper jaw, with three others on each side of them; and at a distance one false grinder, sharp at the edge, and channelled or fluted on the sides; and close to these, two true grinders: in the lower jaw there are two long cutting teeth, formed like those of the squirrel, with three grinders corresponding with those in the upper jaw. 8. D. volans, the flying opossum, a beautiful species, and clothed with fur of the most exquisite texture, is an inhabitant of New South Wales. In length, from the tip of the nose to the root of the tail, it is twenty inches; the tail itself is twenty-two inches; at the base, quite light, increasing gradually to black at the end: the ears are large and erect: the coat or fur is of a rich and most delicate texture, appearing on the upper parts of the body at first sight, of a glossy black; but on a nicer inspection, is found to be mixed with gray; the under parts are white, and on each hip is a tan-colored spot, nearly as big as a shilling; at this part the fur is thinnest, but at the

root of the tail it is so rich and close that the hide cannot be felt through it. The fur is also continued to the claws. On each side of the body is a broad flap or membrane (as in the flying squirrels), which is united to both the fore and hind legs. The jaws are furnished with teeth, placed as in some others of this genus: in the upper jaw forwards are four small cutting teeth, then two canine ones, and backwards five grinders: the under jaw has two long large cutting teeth and five grinders, with no intermediate canine ones, the space being quite vacant. The fore legs have five toes on each foot, with a claw on each; the hinder ones four toes, with claws (the three outside ones without any separation), and a thumb without a claw, enabling the animal to use the foot as a hand, as many of the opossum tribe are observed to do.

DIDEROT (Denys), a celebrated French writer, born at Langres in 1713. He was educated among the Jesuits, with a view to the church, and received the tonsure; but, disliking the profession, he was placed with a lawyer. This pursuit, however, he also abandoned, and thereby incurred his father's displeasure. He did not devote himself particularly to any one object of study; but his attention was at different times engrossed by geometry, metaphysics, and the belles lettres. In 1745 he published Principles of Moral Philosophy, 12mo. which first brought him into public notice as an author. Next year he published a piece, entitled Pensées Philosophiques, a work which gained him considerable fame, and was highly applauded by the partizans of the new philosophy, among whom he had now enrolled himself, and to the propagation of which he applied in the most zealous manner. He afterwards gave a second edition of this work, under the title of Etrennes aux Esprits Forts, which was eagerly read. About this period, having been concerned in a Medical Dictionary, it gave rise to the idea of the Dictionnaire Encyclopédique; and, in conjunction with his friend d'Alembert, the plan of this vast undertaking was formed. Diderot's share in this work was large, for, besides many articles in various departments of science, the whole of the arts and trades were furnished by him. Between the years 1751 and 1767, the first edition of the dictionary was completed; and although Diderot had labored almost twenty years upon it, he received but a small consideration. During this period, however, he composed various other works, particularly A Letter on the Blind, for the use of those who See; a work for which the author was confined six months at Vincennes, on account of the free sentiments it contained. About two years after, he published A Letter on the Deaf and Dumb, for the use of those who Hear and See, 2 vols. 12mo. His next productions were two comedies, in prose, Le Fils Naturel, 1757; and Le Pere de Famille, 1758, which latter has been thought one of the best sentimental comedies that ever appeared on the French stage. Besides the above-mentioned works, Diderot wrote A Panegyric on Richardson; and An Essay on the Life and Writings of Seneca, which was published in 1779, and was the last work of his pen. At the conclusion of the Encyclopedie, he was obliged to dispose of his library. The empress of Russia became a purchaser; the price which the philosopher received was 50,000 livres; while he was to be allowed the use of it during his life. Diderot was a member of the Academy of Sciences at Berlin. He died suddenly as he rose from table, July 31st, 1784. His works have been collected and published in 6 vols. 8vo.

DIDO, or ELISSA, a daughter of Belus, king of Tyre, who married Sichæus or Sicharbas her uncle, priest of Hercules. Her brother, Pygmalion, who succeeded Belus, murdered Sichæus, to get possession of his immense riches; and Dido, disconsolate for the loss of her husband, whom she tenderly loved, and by whom she was equally esteemed, set sail in quest of a settlement, with a number of Tyrians, to whom the cruelty of the tyrant had become odious. According to some writers, she threw into the sea the riches of her husband, which Pygmalion so greedily desired; and by that artifice compelled those ships to fly with her that had come by order of the tyrant to obtain the riches of Sichæus. But it is more probable that she carried the riches along with her, and by their influence prevailed on the Tyrian seamen to follow her. During her voyage, Dido visited the coast of Cyprus, where she obtained fifty wives for her Tyrian followers. A storm drove her fleet on the African coast, where she bought of the inhabitants as much land as could be surrounded by a bull's hide cut into thongs. Upon this land she built a citadel, called Byrsa; and the increase of population, and the rising commerce among her subjects, soon obliged her to enlarge her city, and the boundaries of her dominions. Her beauty, as well as the fame of her enterprise, gained her many admirers; and her subjects wished to compel her to marry Iarbas, king of Mauritania, who threatened them with a dreadful war. Dido begged three months to give her decisive answer; and during that time she erected a funeral pile, as if wishing by a solemn sacrifice to appease the manes of Sichæus, to whom she had promised eternal fidelity. When all was prepared, she stabbed herself on the pile in presence of her people; and by this uncommon action, obtained the name of Dido, 'valiant woman,' instead of Elissa. According to Virgil and Ovid, the death of Dido was caused by the sudden departure of Æneas, of whom she was deeply enamoured, and whom she could not obtain as a husband. This poetical fiction represents Æneas as living in the age of Dido, and introduces an anachronism of nearly 300 years. Dido left Phœnicia 247 years after the age of Æneas, and about A.A.C. 953. This chronological error proceeded not from the ignorance of the poets, but from a voluntary fiction. While Virgil describes, in a beautiful episode, the desperate love of Dido, and the submission of Æneas to the will of the gods, he traces the origin of the hatred between the republics of Rome and Carthage, and pretends that it was kindled by a more remote cause than the jealousy and rivalship of two flourishing empires. Dido, after her death, was honored as a deity by her subjects.

DIDOT (Ambrose), a celebrated French typographer, was born at Paris in 1730. His

father was a printer and bookseller, and, having received a classical education, he materially improved various branches of his business, and the trades connected with it. The manufacture of fine paper received his early attention, and he invented many machines and instruments in aid of stereotyping. His edition of the Delphin classics, and various other works, will long distinguish his name. One of his sons became a celebrated type-founder, another shared with his father the reputation of being one of the first printers in Europe. His anxiety for accuracy is said to have been so great, that at the age of seventy-three, he read five times over each sheet of his son's edition of Montaigne. He died at Paris in 1804.

DIDUCTION, *n. s.* Lat. *diductio.* Separation by withdrawing one part from the other.

He ought to shew what kind of strings they are which, though strongly fastened to the inside of the receiver and superficies of the bladder, must draw as forcibly one as another, in comparison of those that within the bladder draw so as to hinder the *diduction* of its sides. *Boyle.*

DIDUS, or Dodo, in ornithology, a genus belonging to the order of gallinæ. The bill is contracted in the middle by two transverse rugæ; each mandible is inflected at the point; and the face is bare behind the eyes. Only one species, viz. the ineptus, is mentioned by Linnæus: three are described by Buffon, viz.:—

1. D. ineptus, the dronte of Buffon, or hooded dodo, is somewhat bigger than a swan, and nearly three feet in length. The bill is strong, large, and hooked at the end; the gape stretches beyond the eyes: the color is a very pale blue, except the end of the upper mandible, which is yellowish, and a red spot on the bend of it; the end of the lower is blackish; the irides are white. The general color of the plumage is cinereous, and soft to the touch; the belly and thighs are whitish. The head is large, and seems as it were covered with a black hood or cowl. The wings are very short, and of a yellowish ash-color: the tail feathers are curled, stand up on the rump, and incline to yellow. The legs have four toes, three before and one behind; are very stout, short, and yellowish; the claws are black. It inhabits the islands of Mauritius and Bourbon in the Indian Ocean.

2. D. Nazarenus, the Nazarene dodo is bigger than a swan. The bill is a little bent downwards and large: instead of feathers, the whole is covered over with a black down; but the wings are feathered, and it has some frizzled ones upon the rump, which serve instead of a tail: the legs are long and scaly, and there are three toes on each foot. This was met with in the Isle of France, and described as above by Fr. Cauche; who adds, that the female lays only one egg, which is white, and as big as a penny loaf, and that there is always found with it a white stone of the size of a hen's egg; that it makes its nest of leaves and dry herbs, in the forests, on the ground; and that there is likewise found a gray stone in the gizzard of the young bird.

3. D. solitarius, the solitaire of Buffon, or solitary dodo, is a large bird, and the male is said to weigh sometimes forty-five pounds. The neck is of a proportionable length, and the eye black and lively: the head is not crested, and the general color of the plumage is gray and brown mixed: it has scarce any tail, and the bastard wing swells out into a round knob: the wings are too short for flight; and the hind parts are rounded like a horse's rump, being clothed with feathers, which may be termed coverts. The females are covered with sometimes brown, and sometimes light yellow feathers, and appear very beautiful. The feathers on each side of the breast enlarge into two white tufts, somewhat resembling the bosom of a woman. Those of the thighs are rounded at the end like shells; and, according to Leguat, the bird has altogether a noble and elegant gait. It is an inhabitant of the Isle of Rodrigue, where it is not uncommon; but not met with in flocks, scarcely more than two being found together. It makes its nest in by-places, of the leaves of the palm, a foot and a half in thickness; and lays one egg, bigger than that of a goose. The male sits in his turn; and does not suffer any bird to approach within 200 yards of the spot while the hen is sitting, which is seven weeks. They are chased in the winter season, viz. from March to September, being then fat; and the young birds are much esteemed for the table.

DIDYMUS, of Alexandria, an ecclesiastical writer of the fourth century; who though he is said to have lost his sight at five years of age, when he had scarcely learned to read, yet applied so earnestly to study, that he was thought worthy to fill the chair in the famous divinity school at Alexandria. He was the author of a great number of works: but all we have now remaining are, a Latin Translation of his book upon the Holy Spirit, in the works of St. Jerome, who was the translator; Short Strictures on the Canonical Epistles; and a book against the Manichees.

DIDYNA'MIA; from δις, twice, and δυναμις, power; the name of the fourteenth class in Linnæus's sexual method; consisting of plants with hermaphrodite flowers, which have four male organs, two long and two short. See Botany.

DIE, *v. n.* Goth. *deia;* Sax. daedian; Dan. and Swed. *do;* from Gr. δειδω, to fear, because death is generally an object of fear, says Minsheu, ingeniously. To lose or depart from life; taking *by* before an instrument of death; *of* before a disease, or a positive cause of death; and *for* before a privative; to sink or faint; grow vapid; to vanish; perish; be doomed to hell.

For wher we lyuen, we lyuen to the Lord, and whether we *dien*, we *dien* to the Lord, therefore wher we lyuen or *dien* we ben of the Lord.
Wiclif. Romayns. 14.

His heart *died* within him, and he became as a stone. 1 *Samuel.*

Except a corn of wheat fall into the ground, and *die*, it abideth alone; but if it *die*, it bringeth forth much fruit. *John.*

If I *die* for it, as no less is threatened me, the king my old master must be relieved.
Shakspeare. King Lear

How now, my lord, why do you keep alone
Of sorriest fancies your companion making,
Using those thoughts which should indeed have *died*
With them they think on. *Id. Macbeth.*

This battle fares like to the morning's war,
When *dying* clouds contend with growing light. *Id.*

O, thou great power, in whom we move,
By whom we live, to whom we *die*,
Behold me through thy beams of love,
Whilst on this couch of tears I lie. *Wotton.*

So long as God shall live, so long shall the damned *die*. *Hakewill on Providence.*

At first she startles, then she stands amazed;
At last with terror she from thence doth fly,
And loaths the watery glass wherein she gazed,
And shuns it still, although *for* thirst she *die*.
Davies.

Oh let me live my own, and *die* so too!
To live and *die* is all I have to do. *Denham.*

The dira only served to confirm him in his first opinion, that it was his destiny to *die* in the ensuing combat. *Dryden.*

If any sovereignty, on account of his property, had been vested in Adam, which in truth there was not, it would have *died* with him. *Locke.*

The young men acknowledged in love-letters, that they *died* for Rebecca. *Tatler.*

He in the loaden vineyard *dies for* thirst.
Addison.

Hipparchus being passionately fond of his own wife, who was enamoured of Bathyllus, leaped and *died of* his fall. *Id.*

The smaller stains and blemishes may *die* away and disappear, amidst the brightness that surrounds them; but a blot of a deeper nature casts a shade on all the other beauties, and darkens the whole character.
Id. Spectator.

Trembling, hoping, lingering, flying,
Oh the pain the bliss of *dying!* *Pope.*

Talk not of life or ransom, he replies;
Patroclus dead, whoever meets me, *dies*:
In vain a single Trojan sues for grace;
But least the sons of Priam's hateful race;
Die then, my friend! what boots it to deplore?
The great, the good Patroclus is no more!
He, far thy better, was foredoomed to *die*;
And thou, dost thou, bewail mortality?
Pope's Homer.

They often come into the world clear, and with the appearance of sound bodies; which, notwithstanding, have been infected with disease, and have *died of* it, or at least have been very infirm. *Wiseman.*

Thy body *dies*; but thou, *thou* must live for ever, and thine eternity will take its tincture from the manner of thy behaviour, and the habits thou contractest, during this thy short co-partnership with flesh and blood. *Mason.*

If the man who turnips cries,
Cry not when his father *dies*,
'Tis a proof that he had rather
Have a turnip than his father. *Dr. Johnson.*

'Tis solitude should teach us how to *die*;
It hath no flatterers; vanity can give
No hollow aid; alone—man with his God must strive.
Byron.

Like the figures on arras, that gloomily glare,
Stirred by the breath of the wintry air
So seen by the *dying* lamp's fitful light,
Lifeless, but life-like, and awful to sight. *Id.*

Die, *n. s.* Fr. *dé;* Ital. Span. and Portug. *dádo;* Lat. *tessera* (*dice*), from Gr. τεσσαρα, four, because four sided. A small cube, marked on its faces with numbers from one to six, which gamesters throw in play. Hence hazard, chance; and geneally any small cube.

Eftsoons his cruel hand Sir Guyon staid,
Tempering the passion with advisement slow,
And mustering might on enemy dismayed;
For the' equal *die* of war he well did know.
Faerie Queene.

I have set my life upon a cast,
And I will stand the hazard of the *die*.
Shakspeare. Richard III.

To put it to the chance and try,
I' the ballot of a box and *dye*,
Whether his money be his own,
And lose it, if he be o'erthrown. *Butler.*

Thine is the adventure, thine the victory:
Well has thy fortune turned the *die* for thee.
Dryden.

He knows which way the lot and the *die* shall fall, as perfectly as if they were already cast. *South.*

Young creatures have learned spelling of words by having them pasted upon little flat tablets or *dies*.
Watts.

Die, *n. s.*, plural dies. The stamp used in coinage.

Such variety of *dies* made use of by Wood in stamping his money, makes the discovery of counterfeits more difficult. *Swift.*

DIEMEN (Anthony Van), governor of the Dutch East India possessions, was born at Kuilenberg, of which place his father was burgomaster. He went out to India in an inferior station, but was employed there as accountant to the government; and in 1625 became a member of the supreme council. In 1631 he returned to Holland as commander of the India fleet, but the following year went out again as director general; and not long after was appointed governor general, in which station he greatly extended the Dutch interest and power in the east. In 1642 he sent Abel Tasman on a voyage to the south, the consequence of which was the discovery of the island near the south coast of New Holland, which Tasman named Van Diemen's Land. He died in 1645.

DIEMEN'S (Van) Land, an island of Australasia, to the south of New Holland, from which it is separated by Bass's Straits; having its north coast in S. lat. 40° 41′, and its southern promontory in 43° 38′ S. Its length is about 170 miles, and breadth about 154. It was first seen by the Dutch commander, Tasman, in 1642, who, mistaking it for a part of what was then called the Great South Land, or New Holland, gave it its present name, in honor of the Dutch governor-general of Batavia, Anthony Van Diemen. But the Dutch did not land here at this time; Tasman's carpenter only swam through the surf, 'with the prince's flag, and a post, to set up as a memorial of their visit, to the posterity of the inhabitants of this country.' Our own enterprising navigators, Furneaux, Cook, Hayes, and above all Mr. Bass, the companion of captain Flinders, have far better pretensions to be called its discoverers. Furneaux and Cook anchored in Adventure Bay, and the latter had some communication with the islanders; subsequently, Bligh and captain Cox put into Adventure and Oyster Bay; and, in 1794, captain Hayes, of the Bombay marine, sailed up

what he named the Derwent River. But none of these navigators, nor yet the French, under d'Entrecasteaux, who discovered Storm Bay, supposed this to be an island; a fact which Mr. Bass first announced in the close of 1798, after tracing 600 miles of the coasts in this neighbourhood, in a small decked whale-boat. Together with captain Flinders, he also first visited Port Dalrymple.

The general appearance of this island is diversified by ranges of moderate hills and broad valleys, having a fine soil. The hills, the ridges of which 'form,' according to Mr. Evans, 'irregular circles, are for the greater part wooded; and, from their summits, are to be seen levels of good pasture-land, thinly interspersed with trees, the grass growing most luxuriantly. These beautiful plains are generally of the extent of 8000 or 10,000 acres; and this description is to be considered as common to the whole of the island.' The southern extremity terminates in a promontory, whose shape corresponds with, but whose height exceeds, that of the Table Mountain, of the Cape of Good Hope, and to which has been given the same name. The height of the Table, behind Hobart Town, is 3964 feet; that of the Cape 3315. The former is covered with snow for seven or eight months in the year. To the eastward of the Tamar is a considerable mountain, named Ben Lomond, whose height has not been ascertained; and another called Tasman's Peak. There is also a lofty mountain on the north-western part of the island, and a range of hills, called the Asbestos Hills, from the great quantity of that substance found in them. In the south-west part of the island, at the distance of about sixty miles to the north-west of Hobart Town, are the Western Mountains, whose height is computed to exceed 3000 feet. A beautiful lake, in the midst of the last-mentioned range, was visited, for the first time, in 1817, by Mr. Beaumont, the provost-marshal of the island. The principal branch of the Derwent is supposed to flow from it, and he describes it as about fifty miles in circumference, and having its banks moderately clothed with wood. About the middle of the island are salt-pan plains, on which are several small lakes, the waters of which are strongly impregnated with salt, and from which many tons of this article are annually extracted. On all the lakes and rivers are water-fowl in abundance.

The climate is described as exceedingly fine and congenial to Englishmen. 'It is in fact,' says the Quarterly Review, 'England with a finer sky, with less of its winter frosts and of its autumnal and spring moisture; all the fruits and vegetables of an English kitchen-garden are, without difficulty, raised here.' During summer the ordinary course of the weather is the alternate land and sea breeze, the former commencing early in the morning, and prevailing till noon, when it is succeeded by the latter, which usually lasts till after sun-set. Occasionally, however, a hot wind blows from the north or north-west, which, though resembling that of New South Wales, which there raises the thermometer to 106° in the shade, is greatly mitigated in Van Diemen's Land, by passing across Bass's Straits. The autumn is generally a serene and delightful season, and the weather continues fine and open to the middle or end of May. In June, rain, sleet, and, in elevated situations, snow, set in, with strong southerly gales; but, even in winter, fine weather intervenes, and neither wind nor rains can be said to be periodical. Slight frosts occur at night, but neither ice nor snow remains throughout the day in the valleys and plains. In September the spring rapidly advances, and in October the weather resembles the 'faithless April of an English May.'

Van Diemen's Land has four principal ports, connected with its rivers: Storm Bay, terminating with the Derwent; Port Dalrymple, or the Tamar; Port Macquarie, and Port Davey. The river Derwent, besides its direct outlet into Storm Bay, has a lateral one into Storm Bay Passage, canal d'Entrecasteaux, a strait about thirty miles long; dividing the large island Bruny from the main land, and continuing from two to five miles wide, till it opens to the Southern Ocean, at Tasman's Head. This large inlet presents every where bold shores and deep water, perfectly sheltered from all winds, and forming a noble port. The Derwent, at its entrance, is two miles broad, and takes a northerly course, which varies in breadth from one to two miles, expanding, occasionally, into large basins equally deep and safe for the distance of twenty-five miles, to which point ships of 500 tons burden can navigate with ease. Here the river begins to freshen, and continues hence for the distance of forty miles, narrowing gradually, but affording a safe passage for vessels of fifty tons as far as New Norfolk, where a ridge of rocks forms a rapid, and abruptly terminates the navigation.

Twelve miles up the Derwent, on the western bank, stands Hobart Town, the capital of the island, picturesquely placed under the Table Mountain already named. Down its side trill several rivulets, one of the most considerable of which passes through the town, and discharges itself into Sullivan's Cove. The town is laid out on an extensive and regular plan, and has many handsome brick houses; but the majority of the buildings are of wood and plaster. There are very few that are not white-washed (for lime abounds in the neighbourhood), and glazed; and each has a paled garden. Several respectable public buildings are either completed or in progress; as a large church of brick and stone, a government-house, a county-jail, store and commissariat offices, a barrack for 100 men, and a small hospital, fenced in together; a battery, guard-house, magazine, &c. The farms of settlers extend principally along the banks of the Derwent, from the entrance of the river from Storm Bay Passage; for the shores of Van Diemen's Land have often a rich black mould close to the edge of the cliff. On the Hobart side, the most considerable group of settlements is New Town, about two miles from Hobart Town, and is watered by a fine stream. A little below Hobart Town, on the opposite bank, is the settlement of Clarence Plains.

To the eastward, upon the north and east sides of an extensive salt-water inlet, communi-

cating with what the settlers call Frederik Hendrik's Bay, is the more considerable settlement of Pittwater, the chief granary of the island. It is watered by two streams, and presents to view a vast extent of naturally clear ground. On the road from Hobart Town to Port Dalrymple, there is a plain extending, in one direction, for twenty miles, and clear land is frequent on that side of the island. To the north-west of Pittwater is the Coal River settlement. About twelve miles higher up are several farms; midway, stands Mount Direction, a remarkably picturesque hill. There are several scattered farms in this quarter, and on the east of the Derwent, as far as New Norfolk. Above the falls at this place the Derwent receives many rivulets; and a most beautiful and fertile country lies on its banks. All these settlements form together a county, under the name of Buckinghamshire, comprising about half the island, the other half being called the county of Cornwall.

The chief settlement near Port Dalrymple is Launceston, situated forty miles up the Tamar, at the confluence of two small streams, called the North and South Esk. This town is about 120 miles across the island from Hobart Town. The Tamar, not admitting large vessels more than seven or eight miles, George Town has been recently laid out near the mouth of the river, and governor Macquarie speaks of it being already in a flourishing state.

Port Macquarie and Port Davey are on the western coast. The channel inwards, of the former, is made between an island and the west head of entrance; it is very deep, but not more than thirty yards wide; the basin is navigable, but shoally for about eight miles, after which there is deep water. In its cliffs are veins of coal, and on its shores abundance of useful and valuable timber, particularly a sort of cedar called the Huon pine, much esteemed in the colony and in India, for its peculiar property of repelling insects. Port Davey is more to the southward, and is a spacious port, with an open entrance; but the country is rocky and barren, and the timber difficult of access. Into these two ports fall Gordon's and several other rivers.

The mineralogical productions of this island are iron, copper, slate, alum, limestone, asbestos, and basalt; together with crystal, cornelian, jasper, marble, and various petrifactions. The first is most abundant towards Launceston, where entire mountains of this mineral, yielding twenty per cent. of ore, are said to be found. Its botany, and general natural history, resemble those of New South Wales. All kinds of European grain flourish; the harvests have never failed, it is said, for want of rain. 'Barley and oats produce most abundantly, and the wheat is superior to that which is grown in New South Wales; so greatly, indeed, that the difference of price which it bears in Sydney market will generally pay the expense of transport thither; and the average produce is generally greater, with the exception, perhaps, of the flood-lands on the banks of the Hawkesbury and Nepean. The natural grasses afford abundance of pasturage at all seasons of the year, and supersede the necessity of making provision for winter provender in the shape of hay or other artificial food; and, notwithstanding the greater severity of the winters, every description of stock attains a larger size here than in the neighbourhood of Port Jackson. The only advantage which the large island seems to enjoy over this, consists in the fineness of its wool, and the great excellence and variety of its fruits; particularly the grape, which promises to yield as good wine as any that is made in France, Spain, or Portugal. The temperature of Van Diemen's Land is not sufficiently high for the cultivation of the vine; but, by the introduction of the Merino sheep, the wool has been already so much improved, as to leave no doubt it will soon become a valuable article of export to the mother-country. Mr. Wentworth supposes, that twenty years hence, this single article will raise the colonists of New South Wales and Van Diemen's Land, to as high a pitch of happiness and prosperity as is enjoyed by any portion of his majesty's subjects in any quarter of the globe; and that they may be enabled to ship, for Great Britain, every year, at least to the value of a million sterling. The exports, at present, consist of cattle, sheep, wool, flour, corned meats, hams, tongues, dried fish, hides, tallow, barilla, bark for tanning leather, seal-skins and oil, whale-oil, and spars. The markets hitherto opened to the colonists are England, the Cape of Good Hope, Mauritius, and the East Indies. They have also sent considerable supplies of butcher's meat, corn, and potatoes to Port Jackson.'—*Quarterly Review.*

The wild animals are, the kangaroo, opossum, wombat, squirrel, kangaroo-cat, &c., and (rarely) the hyæna opossum. Horned cattle, and particularly sheep, thrive excellently well, the ewes generally dropping lambs twice a year. Goats and pigs run wild. Few indigenous plants were found here, but nearly all the European fruits have cultivated with success.

Van Diemen's Land has a lieutenant-governor and judge-advocate of its own, commissioned by his majesty; but it has not obtained the benefit of a separate criminal jurisdiction, so that prisoners for trial, prosecutors and witnesses, are compelled to make the voyage to Port Jackson. Its civil jurisdiction is confined to causes of £50 value; but the judge of the supreme court of New South Wales has lately made a circuit to the island for the trial of causes of greater value. The colony is peopled by free settlers and convicts from England as well as from New South Wales.

The remaining natives are few in number considering the extent of country which they yet hold free, and in that state of extreme wretchedness which probably forbids their increase. They are, at present, hostilely inclined to Europeans; a circumstance ascribed to a fatal quarrel at the first settling, in which several of them were killed by the rash command of a young officer, and the memory of which has been kept alive by occasional encounters in the interior. The stock-keepers of the settlers are often assaulted by them with spears and stones; but a more friendly intercourse has been effected on the Western Coasts.

The following Tables show:—1. The progress of POPULATION in this Colony, from 1818 to 1820 (omitting the military). 2. The IMPORTS and EXPORTS of the capital at the same period.

TABLE I.—ABSTRACT OF THE GENERAL MUSTER BOOKS OF VAN DIEMAN'S LAND, IN OCTOBER 1818 AND 1820.

	Acres of Land.				Horses.		Horned Cattle		Sheep.		Number of Free Persons and Settlers.			Convicts.		
	In wheat.	In Barley.	In beans and peas.	In potatoes.	Male.	Female.	Male.	Female.	Male.	Female.	Men.	Women.	Children.	Male.	Female.	Total of Population.
Hobart Town, Including that part called the county of Buckingham.																
In 1818	3529	135½	145	247½	97	106	4668	7019	30680	62909	640	333	483	1114	185	2755
In 1820	6293	409	349	454	158	142	8196	13753	44988	95477	726	392	759	1875	266	4018
Port Dalrymple. Including that part called the county of Cornwall.																
In 1818	1520½	78½	3½	21½	29	32	1398	2271	13195	21099	189	78	150	267	55	739
In 1820	2982	119	18	63	45	66	2708	4181	12600	29403	255	118	241	712	104	1450
As many arrivals took place during and since the last Muster may be added .	.	. .	. .	. .	. .	. .	. .	. .	. .	. .	130	20	60	520	. .	730
Grand Total In 1818	5049½	214	148½	269	126	138	6066	9290	43875	84008	829	411	633	1381	240	3494
Grand Total In 1820	9275	528	367	517	203	208	10904	17934	57588	124880	1111	530	1060	3107	370	6178
Increase in 2 years	4226½	314	218½	248	77	70	4838	8644	13713	40872	282	119	427	1726	130	2684

TABLE II.—OFFICIAL RETURN OF THE IMPORTS AND EXPORTS AT HOBART TOWN FOR THE YEARS 1817 AND 1818.

IMPORTS (exclusive of Government Stores, British Goods, and India Piece-Goods).

	Spirits.	Wine.	Beer.	Sugar.	Soap.	Tobacco.	Tea.
	Gallons.	*Gallons.*	*Casks.*	*Tons.*	*Boxes.*	*Baskets.*	*Chests.*
1817	10,313	2,291	47	83	156	370	278
1818	13,537	4,982	152	100	172	203	311

EXPORTS (exclusive of 250 Tons of Oil taken home by the licensed whaler Anne).

	Wheat.	Meat.	Horned Cattle.	Sheep.	Seal and Kangaroo Skins.	Oil.	Potatoes.	Huon Pine.
	Bushels.					*Tons.*	*Tons.*	*Feet.*
1817	24,000	20 tons	—	—	10,000	—	150	—
1818	8,000	70 casks	92	1,200	10,000	90	—	17,500

DIEPHOLT, or DIEPHOLZ, a county of Westphalia, belonging to Hanover, bounded on the north by the county of Hoya, on the east by Minden, on the south by the bishopric of Osnaburg, and on the west by Munster. It is about twenty-four miles long, and twelve broad; and is full of briers, underwood, and morasses; except along the Dumma Lake. It contains four towns and about 16,000 inhabitants. The people are Lutherans, and subsist chiefly by feeding cattle, which they sell to Holland and the countries bordering on the Rhine, along with coarse woollens and linens. This territory was erected into a country by Maximilian I. In 1585 it passed to the duchy of Zell, and from them to the electorate of Hanover. The inhabitants rear cattle and flax.

DIEPPE, a town of Normandy, in the department of the Lower Seine, with a good harbour, formed by the mouth of the river Arques. It has an old castle westward, and two piers. Packet boats pass between this port and Brighton constantly. They are about sixty-six miles distant. The church of St. James is a very fine structure, and there is a tower from which, in fine weather, the coast of England may be seen. The principal trade consists in fish, ivory toys, and laces. It was bombarded, and great part of it burnt by the English, in 1694. Here is a navigation school very well conducted. It contains about 20,000 inhabitants; and lies thirty-four miles north of Rouen, and 100 north-west of Paris.

DIES MARCHIÆ was the day of congress or meeting of the English and Scotch, annually appointed to be held on the marches or borders, in order to adjust all differences between them.

DIESIS, in music, is the division of a tone less than a semitone; or an interval consisting of a less or imperfect semitone. Diesis is the smallest and softest change or inflexion of the voice imaginable: it is called a faint, expressed thus (X) by a St. Andrew's cross or saltire.

DIESPITER, in antiquity, a name given to Jupiter; and signifying diei pater, father of the day.

DI'ET, *n. s.* From *dies*, an appointed day, Skinner; from *diet*, an old German word signifying a multitude.—Junius. An assembly of princes or estates. See the article.

An emperor in title without territory, who can ordain nothing of importance but by a *diet*, or assembly of the estates of many free princes, ecclesiastical and temporal. *Raleigh.*

DI'ET, *v. a.*, *v. n.* & *n. s.*
DIETA'RY, *adj.*
DI'ETER, *n. s.*
DI'ETICAL, *adj.*
DI'ET-DRINK, *n. s.*

} Fr. Germ. and Dut. *diete*; Span. Port. and Ital. *dieta*; from Gr. διαιτα, the manner of living.

To feed or live by rule; to give food to; as a neuter verb, to feed; eat: diet as a substantive is food, generally, or allowance of food. Dietary and dietic, pertaining to diet.

For his diet, there was a continual *diet* given him by the king. *Jeremiah.*

She *diets* him with fasting every day,
The swelling of his wounds to mitigate,
And made him pray both early and eke late.
Faerie Queene.

I'm partly led to *diet* my revenge,
For that I do suspect the lusty Moor
Hath leapt into my seat. *Shakspeare. Othello.*

When we've stuffed
These pipes, and these conveyances of blood,
With wine and feeding, we have suppler souls,
Than in our priestlike fasts; therefore I'll watch him
Till he be *dieted* to my request. *Id. Coriolanus.*

Shew a while like fearful war,
To *diet* rank minds sick of happiness,
And purge the obstructions which begin to stop
Our very veins of life. *Id. Henry IV.*

He sauced our broth as Juno had been sick,
And he her *dieter*. *Id. Cymbeline.*

I commend rather some *diet* for certain seasons, than frequent use of physick; for these *diets* alter the body more, and trouble it less. *Bacon.*

He received no other counsel than to refrain from cold drink, which was but a *dietetical* caution, and such as culinary prescription might have afforded. *Browne's Vulgar Errours.*

Time may come, when men
With angels may participate; and find
No inconvenient *diet*, nor too light fare. *Milton.*

Henceforth my early care
Shall tend thee, and the fertile burden ease;
Till, *dieted* by thee, I grow mature
In knowledge as the gods, who all things know. *Id.*

No part of *diet*, in any season, is so healthful, so natural, and so agreeable to the stomach, as good and well-ripened fruits. *Temple.*

Nature delights in the most plain and simple *diet*. *Addison.*

We have lived upon expedients, of which no country had less occasion; we have *dieted* a healthy body into a consumption, by plying it with physick instead of food. *Swift.*

This book of Cheyne's became the subject of conversation, and produced even sects in the *dietetick* philosophy. *Arbuthnot on Aliments. Pref.*

Milk appears to be a proper *diet* for human bodies, where acrimony is to be purged or avoided; but not where the canals are obstructed, it being void of all saline quality. *Id.*

As an article of *diet*, salt seems to act simply as a stimulus, not containing any nourishment, and is the only fossil substance which the caprice of mankind has yet taken into their stomachs along with their food. *Darwin.*

DIET, in medicine, according to some, comprehends the whole regimen of life, with regard to air, meat, drink, sleep, watching, motion, rest, the passions, retentions and excretions. Others restrict the term to eating and drinking alone. See FOOD. The natural constitution of the body of man is such, that it can easily bear some changes and irregularities without much injury. Had it been otherwise, we should be almost constantly put out of order by slight causes. This advantage arises from those wonderful communications of the inward parts, whereby, when one part is affected, another comes immediately to its relief. Thus, when the body is too full, nature causes evacuations through some of the outlets: and for this reason, diseases from absolute inanition are generally more dangerous than from repletion, unless the latter be excessive; because we can more expeditiously diminish than increase the juices of the body. Upon the same

account, though temperance be beneficial to all men, the ancient physicians advised persons in good health, now and then to eat and drink more plentifully than usual. But of the two, intemperance in drinking is safer than in eating. If a man be obliged to fast, he ought to avoid all laborious work. From satiety it is not proper to pass directly to sharp hunger, nor from hunger to satiety: neither will it be safe to indulge absolute rest immediately after excessive labor, nor suddenly to fall to work after long idleness. In a word, all changes in the way of living should be made by degrees. The softer and milder kinds of aliment are proper for children, and for youth the stronger. Old people ought to lessen the quantity of their food, and increase that of their drink: but some allowance is to be made for custom, especially in cold climates like ours: for as in these the appetite is keener, so is the digestion better performed. The article ALIMENT presents a regular table of all the ordinary articles of human food, or diet: in that of DIGESTION more remarks on this subject occur.

DIET, GENERAL, OF THE GERMAN EMPIRE, was usually held at Ratisbon, It consisted of the emperor, the nine electors, and the ecclesiastical princes; viz. the archbishops, bishops, abbots, and abbesses; the secular princes, being dukes, marquises, counts, viscounts, or barons; and the representatives of the imperial cities. It met on the emperor's summons, but any of the princes might send deputies. Peace and war, the levying of general taxes, and the assessment of different states, were among the principal subjects submitted to the deliberation of the diet. But it required the consent of the emperor to give their determinations the force of laws. The imperial dignity, though not hereditary, was possessed for several ages, without interruption, by the house of Austria. The Confederation of the Rhine, during the domination of Buonaparte, completely dissolved this ancient system, and compelled the house of Austria to resign the style and title of emperor of Germany, which it has not since resumed.

At the congress of Vienna, however, the constitution of Germany was so far remodelled on the former plan, that a new diet was created to watch over the interests of what was now called the Germanic Confederation. By this confederation, although the title of elector ceases, all the states have a vote in the diet according to their respective territories, and the population. The emperor of Austria has no other preponderance than that which arises from the extent of his dominions within the limits of the confederacy. Two new kingdoms were created in the north, and two in the south. These were Hanover and Saxony, in the former; and Bavaria and Wirtemburg, in the latter.

The great powers of this new confederation are Austria, Prussia, Hanover, Saxony, Bavaria, and Wirtemburg. In the diet, each member of the confederacy has an equal vote. The members, as constituted by the act of congress, are seventeen, composed of the following separate or combined powers:—

1. Austria.
2. Prussia.
3. Bavaria.
4. Saxony, kingdom (not the duchies).
5. Hanover.
6. Wirtemberg.
7. Baden.
8. The electorate of Hesse.
9. The grand duchy of Hesse.
10. Denmark for Holstein and Lauenburg.
11. The Netherlands for Luxemburg.
12. The grand ducal, and the ducal houses of Saxony.
13. Brunswick and Nassau.
14. Mecklenburg, Schwerin and Strelitz.
15. Oldenburg, Anhalt, and Schwartzburg.
16. Hohenzollern, Lichtenstein, Reuss, Shaumburg-Lippe, Lippe, and Waldeck.
17. The free towns of Lubeck, Frankfort, Bremen, and Hamburg.

This list therefore exhibits the present political division of Germany, and the states included under the same number vote in the diet conjointly. The deliberations of this body embrace all ordinary discussions; but when general laws are to be enacted, or changes made in the *fundamental* rules or principles of the confederation, the diet forms itself into a general assembly, in which each state votes separately. But as it would evidently have been an unequal partition of power to have given each an equal voice in this assembly, the number of votes possessed by the several states are regulated by their territorial extent and importance. For this purpose, the whole of the confederacy is divided into four classes, which, with the population of each state, according to the official returns of 1818, and the number of votes it possesses in the general assembly, are as follow, viz:—

FIRST CLASS.

States.	Population.	Votes.
1. Austria (for her possessions within the limits of the confederacy)	9,482,227—	4
2. Prussia (exclusive of her Polish territories)	7,923,439—	4
3. Saxony, kingdom of	1,200,000—	4
4. Bavaria, do.	3,560,000—	4
5. Hanover, do.	1,305,350—	4
6. Wirtemburg, do.	1,395,463—	4

SECOND CLASS.

1. Baden, grand duchy of	1,000,000—	3
2. Hesse-Cassel, electorate of	540,000—	3
3. Hesse-Darmstadt, grand duchy of	619,500—	3
4. Holstein and Lauenburg, duchies of	360,000—	3
5. Luxemburg, grand duchy of	214,058—	3

THIRD CLASS.

States.	Population.	Votes.
1. Brunswick, duchy of	209,600—	2
2. Mecklenburg-Schwerin, grand duchy of	358,000—	2
3. Nassau, duchy of	302,767—	2

FOURTH CLASS.

1. Saxe-Weimar, grand duchy of	201,000—	1
2. Saxe-Gotha, duchy of	185,682—	1
3. Saxe-Coburg	80,012—	1
4. Saxe-Meinungen	54,400—	1
5. Saxe-Hildburghausen	27,706—	1
6. Mecklenburg-Strelitz, grand duchy of	71,769—	1
7. Oldenburg	217,769—	1
8. Anhault-Dessau, duchy of	52,947—	1
9. Anhalt-Bernburg	37,046—	1
10. Anhalt-Kothen	32,454—	1
11. Schwartzburg-Sondershausen, principality of	45,117—	1
12. Schwartzburg-Rudolstadt	53,937—	1
13. Hohenzollern-Hechingen	14,500—	1
14. Lichtenstein	5,546—	1
15. Hohenzollern-Sigmaringen	35,360—	1
16. Waldeck, county of	51,877—	1
17. Reuss (Elder Branch), principality of	22,255—	1
18. Reuss (Younger Branch)	52,205—	1
19. Hesse-Homburg	20,000—	1
20. Schaumburg-Lippe	24,000—	1
21. Lippe-Detmold	69,062—	1
22. Lubeck, the free town of	40,650—	1
23. Frankfort	47,850—	1
24. Bremen	48,500—	1
25. Hamburgh	129,800—	1
	30,091,489—	69

This federative body keeps up a military armament, composed in time of peace of 120,000 men, including 96,000 infantry, 18,000 cavalry, and 6000 artillery. In war the contingent is to be increased; the forces being one in every hundred of the population, which, according to the preceding scale, would be 301,000. A reserve of one in every 200 is also to be maintained; which would therefore at present amount to 150,000 men. Of this army

Austria furnishes	94,822
Prussia	79,234
Bavaria	35,600
Wirtemburg	23,955
Hanover	13,054
Saxony, kingdom of	12,000
Baden	10,000
The other states	32,335
	301,000

The pecuniary contributions of the several members of the confederacy have also been voted for five years; after which the proportions are subject to revision. The fortresses that are considered as essential to the defence of the dominions, belong in common to the confederation, and are to be repaired and supported at the general expense. Germersheim, as commanding the passage of the Rhine, is to be made a place of great strength; as well as Homburg and Ulm. For completing the fortifications of the last of these places, the sum of £800,000 was voted by the diet in 1818. In time of war, a generalissimo is to be chosen by the diet, and who is to be accountable to them alone for his conduct.

DIETRICH, or DIETRICY (Christian William Ernest), a modern artist, born at Weimar in 1712. He resided chiefly at Dresden, where he was professor of the Academy of Arts. He succeeded both in history and landscape, and painted above 150 small subjects, which he engraved in the style of Salvator Rosa. Some of these etchings are exceedingly rare.

DIEU ET MON DROIT, Fr. i. e. God and my right. The motto of the arms of England, first assumed by Richard I. to intimate that he did not hold his empire in vassalage of any mortal. It was afterwards taken up by Edward III. and was continued without interruption to the time of king William III. who used the motto Je maintiendray, though the former was still retained upon the great seal. After him queen Anne used the motto Semper eadem, which had been before used by queen Elizabeth; but ever since queen Anne, Dieu et mon droit has been the royal motto.

DIEU ET SON ACTE, in common law, a maxim that the act of God shall hurt no man: so that if a house be beat down by a tempest, the lessee shall not only be free from an action of waste, but also have a right to take the timber to rebuild the house.

DIEU, ISLE DE, an island in the Atlantic, near the coast of France, about seven miles long, and two wide, fifteen miles S.S.W. of Noirmoutier. Long. 15° 17′ E. of Ferro,, lat. 46° 42′ N.

DIEZ (Juan or John Martin), better known as the Empecinado of modern Spanish guerilla warfare, was the son of a peasant of Valladolid.

Old Castile, and born in 1775. Having twice before served in the army, as a private dragoon, he first distinguished himself on the invasion of Spain by Buonaparte in 1808, when placing himself at the head of a party of four or five of his neighbours, he commenced killing the French couriers, seizing their horses, arms, &c. After the massacre committed by the French army at Madrid, Martin openly defied and harassed them in various directions; and besetting the roads, seized their convoys, and exceedingly harassed their small parties. He and his twelve principal comrades are said to have slaughtered 600 Frenchmen in three months. He at first neither gave nor expected quarter; but when at the head of about fifty men, abandoned this mode of warfare, but continued to signalise himself by great personal efforts. In one affair, being opposed to the commander of an enemy's party, the Empecinado received a sword-thrust through his arm into his side; when, enraged by the pain, he seized his adversary by the neck, dragged him from his horse, and fell with him to the ground, keeping himself uppermost. The struggle was violent, until both were disarmed, when, as the Frenchman refused to surrender, the Empecinado holding him down with one hand, snatched up a stone with the other and dashed his brains out. In September, 1809, Martin commanded 170 men, mounted, and placed them under the orders of the junta of Guadalaxara. He afterwards received the rank of a brigadier general of cavalry, but very unwillingly exchanged his peasant's dress for uniform.

When the duke of Wellington entered Madrid in triumph, Diez attended him, and received his commands to join the army in the neighbourhood of Tortosa, at the head of 4850 men. After the peace he addressed a letter to king Ferdinand, dated February 13th, 1815, and evincing considerable powers of mind. It was published in 1823, in 'The Military Exploits of D. Juan Martin Diez, the Empecinado, who first commanded, and then organised the System of Guerilla Warfare in Spain.' Yet he could write, it is said, no more than his name. On the establishment of the present wretched system of government in Spain the Empecinado became obnoxious to the ruling powers, and, notwithstanding all his former services, was seized on a charge of conspiracy, tried, and executed at Ruedtz, the 19th of August, 1825.

DIFF, the name of an instrument in music among the Arabs, serving chiefly to beat time to the voice; it is a hoop, sometimes with pieces of brass fixed to it to make a gingling, over which a piece of parchment is distended. It is beat with the fingers, and is the true tympanum of the ancients.

DIFFARREATION, in Roman antiquity, a ceremony whereby the divorce of their priests was solemnised. The word comes from the preposition dis, used in composition for division, and farreatio, a ceremony with wheat, of far, wheat Diffarreation was properly the dissolving of marriages contracted by confarreation, which were those of the pontifices or priests. Festus says, it was performed with a wheaten cake. Vigenere will have confarreation and diffarreation to be the same thing, contrary to the obvious derivation of the words.

DIF'FER, *v. n.*
DIF'FERENCE, *v. a.* & *n. s.*
DIF'FERENT, *adj.*
DIF'FERENTIAL,
DIF'FERENTLY, *adv.*
DIF'FERINGLY, *adv.*

French *différer*; Span. *deferenciar*; Ital. *differire*, Lat. *differre*, from *dis* different, and *ferre*, to scatter. To be distinguished from; to contend; to be at variance. To difference is to make things to differ; a difference, the diversity or contrariety made: hence a dispute; quarrel; and the evidence or ground of distinction, or quarrel. Differential is a scientific term explained below. The two adverbs seem synonymous.

Where the faith of the holy church is one, a *difference* between customs of the church doth no harm. *Hooker.*

You shall see great *difference* betwixt our Bohemia and your Sicilia. *Shakspeare. Winter's Tale.*

Oh the strange *difference* of man and man!
To thee a woman's services are due;
My soul usurps my body. *Id. King Lear.*

What was the *difference?*
—— It was a contention in publick. *Id. Cymbeline.*

This nobility, or *difference* from the vulgar, was not in the beginning given to the succession of blood, but to the succession of virtue. *Raleigh.*

A man of judgment shall sometimes hear ignorant men *differ*, and know well within himself that those which so *differ* mean one thing, and yet they themselves never agree. *Bacon.*

If the pipe be a little wet on the inside, it will make a *differing* sound from the same pipe dry. *Bacon.*

This is notoriously known in some *differences* of brake or fern. *Browne's Vulgar Errours.*

Opiniators naturally *differ*
From other men; as wooden legs are stiffer
Than those of pliant joints, to yield and bow,
Which way soe'er they are designed to go.
Butler.

Such protuberant and concave parts of a surface may remit the light so *differingly*, as to vary a colour. *Boyle.*

Nothing could have fallen out more unlukcily than that there should be such *differences* among them about that which they pretend to be the only means of ending *differences*. *Tillotson.*

Most are apt to seek all the *differences* of letters in those articulating motions; whereas several combinations of letters are framed by the very same motions of those organs which are commonly observed, and are *differenced* by other concurrent causes. *Holder.*

Thus, born, alike, from virtue first began
The *difference* that distinguished man from man:
He claimed no title from descent of blood;
But that, which made him noble, made him good.
Dryden.

Though it be useful to discern every variety that is to be found in nature, yet it is not convenient to consider every *difference* that is in things, and divide them into distinct classes under every such *difference*. *Locke.*

Grass *differenceth* a civil and well cultivated region from a barren and desolate wilderness. *Ray.*

In things purely speculative, as these are, and no ingredients of our faith, it is free to *differ* from one another in our opinions and sentiments. *Burnet's Theory.*

The world's a wood, in which all lose their way,
Though by a *different* path each goes astray.
Buckingham.

There are certain measures to be kept, which may leave a tendency rather to gain than to irritate those who *differ* with you in their sentiments.
Addison's Freeholder.

He may consider how *differently* he is affected by the same thought, which presents itself in a great writer, from what he is when he finds it delivered by an ordinary genius. *Id.*

By *different* methods *different* men excel;
But where is he that can do all things well?
Churchill.

Plutarch, discoursing of the effects of the air on the minds of men, observes, that the inhabitants of the Piræum possessed very *different* tempers from those of the higher town in Athens, which was distant about four miles from the former: but I believe no one attributes the *difference* of manners in Wapping and St. James's to a *difference* of air or climate. *Hume.*

The *difference* of natural tempers seems to be chiefly owing to the *different* degrees of influence the several passions have upon the mind. *Mason.*

The powers of the letters, when they were applied to a new language, must have been vague and unsettled, and therefore *different* hands would exhibit the same sound by *different* combinations.
Johnson. Preface to Dictionary.

Differential method, is applied to the doctrine of infinitesimals, or infinitely small quantities, called the arithmetick of fluxions. It consists in descending from whole quantities to their infinitely small *differences*, and comparing together these infinitely small *differences*, of what kind soever they be: and from thence it takes the name of the *differential* calculus, or analysis of infinitesimals. *Harris.*

DIFFERENCE, in heraldry, a term given to the figures added to coats of arms, serving to distinguish one family from another; and to show how distant younger branches are from the elder or principal branch.

DIFFERENCE, in logic, an essential attribute belonging to some species, and not found in the genus; being the idea that defines the species. Thus, body and spirit are the two species of substance, which, in their ideas include something more than is included in the idea of substance. In body, for instance, is found impenetrability, and extension; in spirit, a power of thinking and reasoning; so that the difference of body is impenetrable extension, and the difference of spirit is cogitation.

DIFFERENCE, in mathematics, is the remainder, when one number or quantity is subtracted from another.

DIFFERENTIAL, in the higher geometry, is an infinitely small quantity, or a particle of quantity so small as to be less than any assignable one. It is called a differential, or differential quantity, because frequently considered as the difference of two quantities; and, as such, is the foundation of the differential calculus. Sir Isaac Newton, and the English, call it a moment, as being considered as the momentary increase of quantity. See CALCULUS.

DIF'FICILE, *adj.* DIF'FICILENESS, *n. s.* DIF'FICULT, *adj.* DIF'FICULTLY, *adv.* DIF'FICULTY, *n. s.* } Fr. *difficile*; Span. *dificil*; Ital. and Lat. *difficile*, *de*, privative, and *facilis*, easy. Hard; not easy; not obvious; distressing; scrupulous. Difficile and difficult are synonymous adjectives; the former being common in our old writers. The synonymous substantives are difficulty and difficileness.

It is *difficult* in the eyes of this people.
Zachar.

The cardinal finding the pope *difficil* in granting the dispensation, doth use it as a principal argument, concerning the king's merit, that he had touched none of those deniers which had been levied by popes in England. *Bacon.*

There be that in their nature do not affect the good of others: the lighter sort of malignity turneth but to a crossness or frowardness, or aptness to oppose, or *difficilness*, or the like; but the deeper sort to envy and mere mischief. *Id.*

The way he came, not having marked, return
Was *difficult*, by human steps untrod. *Milton.*

Latin was not more *difficil*
Than to a blackbird 'tis to whistle. *Hudibras.*
Some write in Hebrew, some in Greek,
And some, more wise, in Arabic,
To avoid the critic, and the expense
Of *difficulty*, wit, and sense. *Id.*

A man, who has always indulged himself in the full enjoyment of his station, will *difficultly* be persuaded to think any methods unjust that offer to continue it. *Rogers's Sermons.*

They mistake *difficulties* for impossibilities; a pernicious mistake certainly; and the more pernicious, for that men are seldom convinced of it, till their convictions do them no good. *South.*

Men should consider, that raising *difficulties* concerning the mysteries in religion, cannot make them more wise, learned, or virtuous. *Swift.*

It is very *difficult* to praise a man without putting him out of countenance. *Addison.*

If, therefore, we would have the benefit of seeing our language more generally known among mankind, we should endeavour to remove all the *difficulties*, however small, that discourage the learning of it. But I am sorry to observe, that of late years those *difficulties*, instead of being diminished, have been augmented. *Franklin.*

Some of the cases which occurred about this time are of such a kind, that it is *difficult* to imagine by what casuistry the jury could have been reconciled to their verdict. *Sir S. Romilly.*

Nothing so *difficult* as a beginning
In poesy, unless perhaps the end;
For oftentimes when Pegasus seems winning
The race, he sprains a wing, and down we tend,
Like Lucifer, when hurled from heaven for sinning.
Byron.

DIFFIDE', *v. n.* DIF'FIDENCE, *n. s.* DIF'FIDENT, *adj.* } Fr *défier*; from Lat. *diffido*; *de*, privative, and *fide*, confidence; trust. To distrust; have no reliance on: diffidence, the more common word, is therefore, doubt; distrust; whether applied to ourselves or others.

No man almost thought himself secure, and men durst scarce commune or talk one with another; but there was a general *diffidence* every where.
Bacon's Henry VII.

I am not so confident of my own sufficiency, as not willingly to admit the counsel of others; but yet I am not so *diffident* of myself, as brutishly to submit to any man's dictates. *King Charles.*

You have brought scandal
To Israel, *diffidence* of God, and doubt
In feeble hearts, propense enough before
To waver. *Milton's Agonistes.*

Be not *diffident*
Of wisdom; she deserts thee not, if thou
Dismiss not her, when most thou need'st her nigh.
Milton.

If the evidence of its being, or that this is its true sense, be only on probable proofs, our assent can reach no higher than an assurance or *diffidence* arising from the more or less apparent probability of the proofs. *Locke.*

With hope and fear
The woman did the new solution hear:
The man *diffides* in his own augury,
And doubts the gods. *Dryden.*

The generality of mankind, either out of laziness, or *diffidence* of their being able to judge right in points that are not very clear, are apt rather to take things upon trust, than to give themselves the trouble to examine whether they be true or no. *Buckingham.*

Be silent always when you doubt your sense;
And speak, though sure, with seeming *diffidence.*
Pope.

Distress makes the humble heart *diffident.*
Clarissa.

Pliny speaks of the Seres, the same people with the Chinese, as being very shy and *diffident* in their manner of dealing. *Arbuthnot.*

My memory of past errors makes me *diffident* for the future. *Hume on the Human Understanding.*

DIFFI'ND, *v. a.* Lat. *diffindo.* To cleave in two; to split.

DIFFI'SSION, *n. s.* Lat. *diffissio.* The act of cleaving or splitting.

DIFFLA'TION, *n. s.* Lat. *difflare.* The act of scattering with a blast of wind.

DIFFLU'ENCE, or DIFFLUEN'CY, *n. s.* DIFFLU'ENT, *adj.* Lat. *diffluo; dis,* diversely, and *fluo,* to flow; Gr. βλοω. To flow diversely. The flowing away on all sides, as a fluid.

Ice is water congealed by the frigidity of the air, whereby it acquireth no new form, but rather a consistence or determination of its *diffluency;* and admitteth not its essence, but condition of fluidity.
Browne's Vulgar Errours.

DI'FFORM, *adj.* DI'FFORMITY, *n. s.* From Lat. *forma.* Contrary to uniform; having parts of different structure; dissimilar; unlike; as a difform flower, of which the leaves are unlike each other.

While they murmur against the present disposure of things, they desire in them a *difformity* from the primitive rule, and the idea of that mind that formed all things best. *Browne's Vulgar Errours.*

The unequal refractions of *difform* rays proceed not from any contingent irregularities; such as are veins, an uneven polish, or fortuitous position of the pores of glass. *Newton.*

DIFFRA'NCHISEMENT, *n. s.* Fr. *franchise.* The act of taking away the privileges of a city.

DIFFUS'E, *v. a* & *adj.* DIFFUSE'D, *part. adj.* DIFFU'SEDLY, *adv.* DIFFU'SEDNESS, *n. s.* DIFFU'SION, DIFFU'SIVE, *adj.* DIFFU'SIVELY, *adv.* Ital. *diffondere,* Lat. *diffundere; dis,* diversely, and *fundo,* to shed. To pour out on a superficies; hence to spread, to scatter; diffuse, as an adjective, therefore, sometimes means obscure of meaning; difficult to gather; also extended. Diffusion is a state of dispersion; copiousness; exuberance.

He grows like savages,
To swearing and stern looks, *diffused* attire,
And every thing that seems unnatural.
Shakspeare. Henry V.

Whereas all bodies act either by communication of their natures, or by the impressions and signatures of their motions, the *diffusion* of species visible seemeth to participate more of the former operation, and the species audible of the latter. *Bacon's Natural History.*

Wisdom had ordained
Good out of evil to create; instead
Of spirits malign, a better race to bring
Into their vacant room, and thence *diffuse*
His good to worlds, and ages, infinite. *Milton.*

A sheet of very well sleeked marble paper did not cast distinct colours upon the wall, nor throw its light with an equal *diffusion;* but threw its beams, unstained and bright, to this and that part of the wall.
Boyle on Colours.

A chief renowned in war,
Whose race shall bear aloft the Latian name,
And through the conquered world *diffuse* our fame.
Dryden.

The stars, no longer overlaid with weight,
Exert their heads from underneath the mass,
And upward shoot, and kindle as they pass,
And with *diffusive* light adorn their heavenly place.
Id.

No man is of so general and *diffusive* a lust, as to prosecute his amours all the world over. *South.*

They are not agreed among themselves where infallibility is seated; whether in the pope alone, or a council alone, or in both together, or in the *diffusive* body of Christians. *Tillotson.*

All liquid bodies are *diffusive;* for their parts being in motion, have no connexion, but glide and fall off any way. *Burnet's Theory of the Earth.*

The fault that I find with a modern legend is its *diffusiveness;* you have sometimes the whole side of a medal overrun with it. *Addison on Medals.*

The wisdom of the ignorant somewhat resembles the instinct of animals; it is *diffused,* but in a very narrow sphere; but within the circle it acts with vigour, uniformity, and success. *Goldsmith.*

Some glossy-leaved and shining in the sun,
The maple, and the beech of oily nuts
Prolific, and the lime at dewy eve,
Diffusing odours. *Cowper.*

DIG, *v. a.* & *v. n.* Saxon, dic; Dan. *dyger;* Belg. *dyken;* from *dick,* a ditch. To pierce and turn over the earth; to cultivate ground; to form by digging; to pierce; to obtain any thing by this operation. As a neuter verb, to work with the spade.

They long for death, but it cometh not; and *dig* for it more than for hid treasures. *Job* iii. 21.

If I *digged* up thy forefathers' graves,
And hung their rotten coffins up in chains,
It would not slake mine ire. *Shakspeare.*

The walls of your garden, without their furniture, look as ill as those of your house: so that you cannot *dig* up your garden too often. *Temple.*

When we visited mines, we have been told by *diggers*, that even when the sky seemed clear, there would suddenly arise a steam so thick, that it would put out their candles. *Boyle.*

Nor was the ground alone required to bear
Her annual income to the crooked share;
But greedy mortals, rummaging her store,
Digged from her entrails first the precious ore.
Dryden's Ovid.

A rav'nous vulture in his opened side
Her crooked beak and cruel talons tried;
Still for the growing liver *digged* his breast;
The growing liver still supplied the feast.
Id. Æneid.

The Italians have often *dug* into lands, described in old authors as the places where statues or obelisks stood, and seldom failed of success.
Addison's Travels.

It is *digged* out of even the highest mountains, and all parts of the earth contingently; as the pyrites.
Woodward.

The bushman spade is a pointed stick about three feet long, to which there is affixed about the middle a stone to increase its power in *digging* up bulbous roots. *Burchell's Travels.*

DIGAMMA, a letter of the Greek language retained in the Æolic dialects. Dr. Jones observes that such letters were formerly aspirates, as they derived their origin from the strong gutturals, which the Greeks borrowed from the oriental tongues; and hence he traces the origin of the Æolic digamma. It is the tendency of every guttural, says this writer, when become habitual, to soften down in the rapidity of utterance into a mere aspirate. The digamma, he contends, did not belong, as Dr. Bentley and others supposed, to the Æolic dialect only, but to all the dialects of Greece in their more ancient mode of pronunciation; and he observes, in opposition to the opinion of the learned, who say that the digamma at first prevailed, and was afterwards succeeded by the aspirate, that the gutturals at first prevailed, which were softened into mere aspirates, and that these were again changed for a more easy and agreeable letter, which being simply a labial, was diversified by different people into *y*, *w*, *v*, *φ*, *b* or *f*.

Dr. Marsh would have it called, the *Pelasgic* digamma. 'The connexion,' says he, 'between the Pelasgi and the Æolic dialect has been fully established. Indeed, it might properly be called the Pelasgic dialect: for it was used by the Pelasgi, before the name of Æolic existed. The principal migrations of the Pelasgi, both to Italy, and to the islands in the Ægean sea, took place from Thessaly, as we have already seen, during the reign of Deucalion. They carried, therefore, their dialect to Italy, and to the islands in the Ægean sea, before that dialect had acquired the appellation of Æolic. The character, therefore, which distinguishes the Æolic dialect, might properly be called the Pelasgic digamma.'—*Horo Pelasgæ*, p. 50.

This, however, the learned bishop of Salisbury disputes.—'By the Æolians,' the Digamma, as he states, 'was anciently called Vau, or Wau, the name which is given to the sixth letter in the Hebrew, Syriac, and Samaritan Alphabets, and to the letter corresponding to it in the Arabic and Ethiopic Alphabets. The term Digamma has little or no relation to its power, and must have been given to it after the knowledge of its origin was lost. The Greek grammarians, comparing it with the third letter of their alphabet, called it a double gamma; but it was in fact a double Vau. Its new name must have followed its new figure, which was probably given it to distinguish the consonant power of the letter from the vowel.'—*Letter to the Bishop of Durham.* 1815.

However this may be, Homer has so frequently used it, as to give it with some writers the name of the Homeric digamma. His object was clearly to avoid every hiatus of vowels: but when the introduction of aspirates had insensibly abolished the use of this letter with the transcribers, its existence could only be traced in a few ancient inscriptions. To remove the harshness thus often apparent in this great poet, the commentators interposed the final *ν*, or the particles *νʹ*, *δʹ*, *τʹ*, altering, with respect to the first, the case of words sometimes and consequently the sense. 'Numberless passages,' says Dr. Valpy, 'remained in their naked deformity, and exercised the conjectural sagacity of grammarians and commentators. Thus in the verse in the opening of the Iliad; 'Ηρώων αὐτοὺς δὲ ἑλώρια τεῦχε κύνεσσιν;' aware of the inharmonious effect of the concurrence of the two *ε*, they cut off the former. The quantity of the latter created another difficulty. Some doubled the λ, and others asserted that *ε* was lengthened before the liquid. But there were passages, to which even these and similar expedients were inapplicable. A successful effort was made by the great Bentley to remove these embarrassments. The restoration of the digamma has at length vindicated the poet, and displayed the harmonious beauties of his original versification.' Dr. V. furnishes us with the following Table of words in Homer, which either constantly, or generally, admit the digamma in the initial vowel.

A			
ἄγω,	} to break,	ἔθνος,	ἑλεὸς,
ἄγνυμι,		εἰδέω,	ἕλικες,
ἄδω,		εἴδω,	ἑλίκωπες,
ἄλημι,		εἴδωλον,	ἑλίσσω,
ἄλις,		εἴκελος,	ἐλπὶς,
ἄλωμι,		εἴκοσι,	ἔλπω,
ἄναξ,		εἴκω, to resemble,	ἕλω,
ἀνδάνω,		εἰλαρ,	ἕλωρ,
ἀραιὸς,		εἰλέω,	ἑλώριον,
ἄρδω,		εἰλύω,	ἕνετοι,
ἄρη,		εἰλυφάω,	ἔννυμι,
ἄριστον,		εἴλω,	ἔοικα,
ἄρνες,		εἶμα,	ἑὸς,
ἄστυ,		εἶργω,	ἔπος,
αὐσταλεός.		εἴρω,	ἔπω,
		εἴσκω,	ἔργον,
E		ἕκαθεν,	ἐργω,
		ἑκὰς,	ἔρδω,
ἔ,		ἕκαστος,	εἴρω,
ἔαρ,		ἕκατος,	ἐριήρης,
ἕδνον,		ἕκηλος,	ἔρρω,
ἕθειρα,		ἔκητι,	ἐρύω, to draw
ἕθεν,		ἑκυρὸς,	ἑσθής,
		ἑκὼν,	ἕσθος,

ἕσπερος,	I	ἴτυς,
ἑστίη,	ἰάχη,	ἶφι,
ἔτης,	ἰάχω,	ἴψ,
ἔτος,	ἶδρις,	ἰωὴ,
ἑτώσιος,	ἵεμαι,	ἰωκή,
ἕω, to put on.	ἵκελος,	O
	Ἴλιος,	ὄαρες,
H	ἶνες,	οἶδμα,
ἠδὺς,	ἰνίον,	οἶκος,
ἠδύω,	ἴον,	οἶνος,
ἦθος,	ἰονθὰς,	ὅς,
ἤϊος,	Ἶρις,	οὗ,
ἦκα, adv.	ἷς,	οὐλαμὸς,
ἠνοψ,	ἵσημι,	οὖλος,
ἦρ,	ἶσος,	οὖρον.
ἦρα,	ἵσκω,	
Ἥρη,	ἱστίη,	Ω
ἠρίον,	ἵστωρ,	ὦλξ,
ἦχη.	ἰτέα,	ὡς,

The form of the digamma in the first instance was that of a gamma reversed; then that of a gamma; afterwards it was written in the shape of a double gamma *F*, whence it derives its name; and hence it has been written Γ as Γαβιοι for Ϝαβιοι, Γεθεν for Ϝεθεν, Γεντο for Ϝεντο, Æol. for ἕντο, Dor. for ἕλτο, from ἕλω, &c. Claudius ordered that it should be written Ⅎ, or F reversed, but that form seems to have ceased after it was used in the inscription on the tomb of that emperor 'TERMINAƎIT.' It has often been expressed by B, and sometimes by K, M, Π, P, Φ, X. See letter F.

DI'GAMY, *n. s.* Gr. *διγαμια*. Second marriage; marriage to a second wife after the death of the first: as bigamy, having two wives at once.

Dr. Champny only proves, that archbishop Cranmer was twice married; which is not denied: but brings nothing to prove that such bigamy, or *digamy* rather, deprives a bishop of the lawful use of his power of ordaining. *Bishop Ferne.*

DIGBY, a town of Nova Scotia, on the south-east side of Annapolis Bay, eighteen miles south-west of Annapolis, and fifty-three north by east of Yarmouth. It is one of the most considerable of the new settlements of Nova Scotia.

DIGBY (Sir Kenelm), an illustrious author and statesman of the seventeenth century, was descended of an ancient English family. His father, Everard, was beheaded under king James I. for being engaged in the gunpowder plot. King Charles I. made the son a gentleman of the bed-chamber, commissioner of the navy, and governor of the Trinity House. He granted him letters of reprisals against the Venetians, by virtue of which he took several prizes, with a small fleet. He fought the Venetians near the port of Scanderoon, and bravely made his way through them with his booty. He also translated various authors into English; and his Treatise on the Nature of Bodies and the Immortality of the Soul, discovers great penetration and knowledge. In the beginning of the civil wars, he exerted himself vigorously in the king's cause; but was afterwards imprisoned, by order of the parliament, in Winchester-house, and had leave to depart thence in 1643. He afterwards compounded for his estate, but was ordered to leave the nation; when he went to France, and was sent on two embassies to pope Innocent X. from the queen, widow of Charles I. whose chancellor he then was. On the Restoration he returned to London, where he died in 1665, aged sixty.

DIGE'ST, *v. a.* & *n. s.*
DIGEST'ER, *n. s.*
DIGEST'IBLE,
DIGEST'ION, *n s.*
DIGEST'IVE, *adj.* & *n. s.*
DIGEST'URE.

Fr. *digerer*; Sp. *digestir*; Lat. *digero, digestum, dis* diversely, and *gero* to bear. To distribute, or reduce, into the proper classes, or sorts: hence to concoct in the stomach, and soften or adapt by heat; and to receive with enjoyment. The derivatives all follow these meanings.

First, let us go to dinner,
—Nay, let me praise you while I have a stomach.
—No, pray thee, let it serve for table talk,
Then, howsoe'er thou speak'st, 'mong other things
I shall *digest* it. *Shakspeare.*

Now good *digestion* wait on appetite
And health on both. *Id.*

I had a purpose to make a particular *digest*, or recompilement to the laws of mine own nation. *Bacon.*

We conceive, indeed, that a perfect good concoction, or *digestion*, or maturation of some metals, will produce gold. *Id.*

Those medicines that purge by stool are, at the first, not *digestible* by the stomach, and therefore move immediately downwards to the guts. *Id.*

A chilifactory menstruum, or a *digestive* preparation, drawn from species or individuals, whose stomachs peculiarly dissolve lapideous bodies. *Browne's Vulgar Errours.*

It is not good to devour the favours of God too greedily: but to take them in, that we may *digest* them. *Bp. Hall. Contemplations.*

The earth and sun were in that very state; the one active, piercing, and *digestive*, by its heat; the other passive, receptive, and stored with materials for such a production. *Hale.*

The *digestion* of the counsels in Sweden is made in senate, consisting of forty counsellors, who are generally the greatest men. *Temple.*

Rice is of excellent use for all illnesses of the stomach, a great restorer of health, and a great *digester*. *Id.*

When men comfort themselves with philosophy, it is not because they have got two or three sentences, but because they have *digested* those sentences, and made them their own; so upon the matter, philosophy is nothing but discretion. *Selden.*

Every morsel to a satisfied hunger, is only a new labour to a tired *digestion*. *South.*

Did chymick chance the furnaces prepare,
Raise all the labour-houses of the air,
And lay crude vapours in *digestion* there? *Blackmore.*

People that are bilious and fat, rather than lean, are great eaters and ill *digesters*. *Arbuthnot.*

Laws in the *digest* shew that the Romans applied themselves to trade. *Id. On Coins.*

I dressed it with *digestives*. *Wiseman.*

The first stage of healing, or the discharge of matter, is by surgeons called *digestion*. *Sharp's Surgery.*

Chosen friends, with sense refined,
Learning *digested* well. *Thomson.*

Britain has not yet well *digested* the loss of its dominion over us; and has still at times some flattering hopes of recovering it. *Franklin.*

As Life discordant elements arrests,
Rejects the noxious, and the pure *digests*,
Combines with Heat the fluctuatiug mass,
And gives awhile solidity to gas. *Darwin.*

Oh, the souls of some men
Thou wouldst *digest* what some call treason, and
Fools treachery. *Byron.*

DIGEST, DIGESTUM, is a collection of the Roman laws, ranked and digested under proper titles by order of the emperor Justinian. That prince gave his chancellor Tribonianus a commission for this purpose: who, in consequence of this, chose sixteen jurisconsulti, or lawyers, to work upon them. These, accordingly, took the best decisions from the 2000 volumes of the ancient jurisconsulti, and reduced them all into one body; which was published A. D. 533, under the name of the Digest. To this the emperor gave the force of a law, by a letter at the head of the work, which serves it as a preface. The Digest makes the first part of the Roman law, and the first part of the corpus or body of the civil law contained in fifty books. It was translated into Greek under the same emperor, and called Pandecta. See PANDECTS. Cujas says, that Digest is a common name for all books disposed in a good order and economy; and hence Tertullian calls the gospel of St. Luke a digest. Hence also abridgments of the common law are denominated digests of the numerous cases, arguments, readings, pleadings, &c., dispersed in the year books and other reports and books of law, reduced under proper heads. The first was that of Statham, which comes as low as Henry VI.

DIGESTER, an instrument invented by Mr. Papin about the beginning of the last century. It is a strong vessel of copper or iron, with a cover adapted to screw on with pieces of felt or paper interposed. A valve with a small aperture is made in the cover, the stopper of which valve may be more or less loaded, either by actual weights, or by pressure from an apparatus on the principle of the steelyard. The purpose of this vessel is to prevent the loss of heat by evaporation. The solvent power of water when heated in this vessel is greatly increased.

DIGESTION. For the rationale of this process, see PHYSIOLOGY. See also the word BILE for an account of part of the changes which aliment undergoes, before it may in one sense be said to be duly digested; and, for an account of the derangements in the process of digestion see the article MEDICINE, and the word STOMACH; under which last word, the reader will find a detailed account of those modern theories which have recently excited so much attention in respect of stomach derangements and their general influence over the frame. It is under this word, that we propose discussing the merits and demerits of these theories, and engaging in a somewhat comprehensive disquisition on the subject in all its bearings.

DIGESTIVES, in medicine, such remedies as strengthen and increase the tone of the stomach, and assist in the digestion of food. To this class belong all stomachics and strengtheners, or corroborants.

DIGGING, among miners, is appropriated to the operation of freeing any kind of ore from the bed or stratum in which it lies, where every stroke of their tools turns to account: in contradistinction to the openings made in search of ore, which are called hatches, or essay hatches: and the operation itself, tracing of mines or hatching. When a bed of ore is discovered, the beele-men free the ore from the fossils around it; and the shovel-men throw it from one shamble to another, till it reaches the mouth of the hatch. In most mines, to save the expense as well as fatigue of the shovel-men, they raise the ore by means of a winder and two buckets, one of which goes up as the other comes down.

DIGHT, *v. a.* Goth. & Swed. *duga*; Sax. dihten. To arrange; dress; embelish. It seems always to signify the past; the participle passive is dight, as dighted in Hudibras is perhaps improper.

Every spirit as it is most pure
And hath in it the more of heavenly light,
So it the fairere body doth procure
To habit in, and it more fairly *dight*
With cheerful grace, and amiable sight.
Spenser.

On his head his dreadful hat he *dight*,
Which maketh him invisible to sight.
Hub. Tale.

Let my due feet never fail
To walk the studious cloisters pale;
And love the high embowed roof,
With antick pillar, massy proof;
And storied windows richly *dight*,
Casting a dim religious light. *Milton.*

Just so the proud insulting lass
Arrayed and *dighted* Hudibras. *Hudibras.*

DIG'IT, *n. s.* } Lat. *digitus*; from Gr.
DIGITATED, *adj.* } δεικω, δεικετος, to show, because we point out any thing with the finger. Any of the numbers expressed by a single finger. Also a measure of about three-fourths of an inch, from the width of the finger; or the twelfth part of the sun's or moon's diameter. Digitated is branched out.

Not only the numbers seven and nine, from considerations abstruse, have been extolled by most, but all or most of other *digits* have been as mystically applauded. *Browne's Vulgar Errours.*

For animals multifidous, or such as are *digitated*, or have several divisions in their feet, there are but two that are uniparous; that is, men and elephants. *Id.*

If the inverted tube of mercury be but twenty-five *digits* high, or somewhat more, the quicksilver will not fall, but remain suspended in the tube, because it cannot press the subjacent mercury with so great a force as doth the incumbent cylinder of the air, reaching thence to the top of the atmosphere. *Boyle.*

DIGIT, in astronomy, is used to express the quantity of an eclipse. Thus an eclipse is said to be of six digits, when six of these parts are hid.

DIGIT, is also a measure taken from the breadth of the finger. It is properly three-fourths of an inch, and contains the measure of four barley-corns laid breadthwise.

DIGITALIS, fox-glove, a genus of the angiospermia order, and didynamia class of plants; natural order twenty-eighth, luridæ: CAL. quin-

quepartite: cor. campanulated, quinquefid, and ventricose; caps. ovate and bilocular. There are six species: five of which are hardy, herbaceous, biennial, and perennial plants, and the sixth a tender shrubby exotic. The herbaceous species rise two or three feet high, crowned with spikes of yellow, iron-colored, or purple flowers. The shrubby sort rises five or six feet high, having spear-shaped rough leaves, four or five inches long, and half as broad; the branches being all terminated with flowers growing in loose spikes. All the species are easily raised by seeds. An ointment made of the flowers of purple fox-glove and May butter, is much commended by some physicians for scrophulous ulcers which run much and are full of matter. Taken internally this plant is a violent purgative and emetic; and is therefore only to be administered to robust constitutions: indeed it often proves even then a poison. An infusion of two drachms of the leaf in a pint of water, given in half-ounce doses every two hours or so, till it begin to purge, is recommended in dropsy, particularly that of the breast. It is said to have produced an evacuation of water so copious and sudden, in ascites, by stool and urine, that the compression of bandages was found necessary. The plentiful use of diluents is ordered during its operation. But besides being given in infusion, it has also been employed in substance. And when taken at bedtime to the extent of one, two, or three grains of the dried powder, it often in a short time operates as a very powerful diuretic, without producing any other evacuation. Even this quantity, however, will sometimes excite very severe vomiting, and that too occurring unexpectedly.

DIGLADIATION, *n. s.* Lat. *digladiatio*. A combat with swords; any quarrel or contest.

Aristotle seems purposely to intend the cherishing of controversial *digladiations*, by his own affection of an intricate obscurity. *Glanville.*

DIGLIGGYHEUR, a town in the island of Ceylon, about ten miles to the eastward of Candy, on the road to Battacolo. The district around is very wild and impenetrable, for which reason it was once a royal residence; and when the king was driven out of Candy, and his capital burned by the British in 1803, he found here a retreat, to which no European army could penetrate. There are a few villages among the surrounding hills, and some rice grounds.

DIGLYPH, in architecture, a kind of imperfect triglyph, console, or the like: with two channels or engravings either circular or angular.

DIGNE, the chief town of the department of the Lower Alps, France, famous for the baths near it. It is seated on the Bleone, and is a bishop's see. The streets are steep and winding, and the houses mean; but the cathedral is a respectable edifice, and there are four other churches Not far from the town there is an extinct volcano. It contains about 3500 inhabitants. Thirty miles south of Apt, and thirty-four south by west of Embrun.

DIG'NIFY *v. a.*
DIGNIFICA'TION, *n. s.*
DIG'NIFIED, *adj.*
DIG'NITARY, *n. s.*
DIG'NITY, *n. s.*

From Lat, *dignus* (Gr. δικη, right) worthy; and *facio* to make. To advance; promote; raise to honor. Dignification and dignity are synonymous substantives; and the cognates of the latter. Fr. *dignité*; Span. *dignidad*; It. *dignita*, Dignities is used by Browne for the general or chief maxims of a science. Ayliffe says, that among ecclesiastics, 'we understand by a dignity that promotion or preferment to which any jurisdiction is attached.' Dignitary has also a peculiar application to clergymen, above the rank of a parish-priest; but is likewise used generally.

Angels are not any where spoken so highly of as our Lord and Saviour Jesus Christ, and are not in *dignity* equal to him. *Hooker.*

Such a day,
So fought, so followed, and so fairly won,
Came not till now to *dignify* the times
Since Cæsar's fortunes! *Shakspeare. Henry IV.*

Not that we think us worthy such a guest,
But that your worth will *dignify* our feast.
Ben Jonson.

The sciences concluding from *dignities*, and principles known by themselves, receive not satisfaction from probable reasons, much less from bare asseverations. *Brown.*

I grant that where a noble and ancient descent and merit meet in any man, it is a double *dignification* of that person. *Walton's Angler.*

Abbots are stiled *dignified* clerks, as having some *dignity* in the church. *Ayliffe's Parergon.*

If there be any *dignitaries*, whose preferments are perhaps not liable to the accusation of superfluity, they may be persons of superior merit. *Swift.*

Some men have a native *dignity*, which will procure them more regard by a look, than others can obtain by the most imperious commands. *Clarissa.*

The peaceable lawyers are, in the first place, many of the benchers of the several inns of court, who seem to be the *dignitaries* of the law, and are endowed with those qualifications of mind that accomplish a man rather for a ruler than a pleader. *Addison.*

No turbots *dignify* my boards;
But gudgeons, flounders, what my Thames affords.
Pope.

We all know, that those who loll at their ease in high *dignities*, whether of the church, or of the state, are commonly averse to all reformation. *Burke.*

Or, turning to the Vatican, go see
Laocoon's torture *dignifying* pain—
A father's love and mortal's agony
With an immortal's patience blending. *Byron.*

DIGNITY, as applied to the titles of noblemen, signifies honor and authority. And dignity may be divided into superior and inferior; as the titles of duke, marquis, earl, baron, &c. are the highest names of dignity; and those of baronet, knight, serjeant at law, &c., the lowest. Nobility only can give so high a name of dignity as to supply the want of a surname in legal proceedings; and as the omission of a name of dignity may be pleaded in abatement of a writ, &c., so it may be where a peer who has more than one name of dignity is not named by the Most Noble. No temporal dignity of any foreign nation can give a man a higher title here than that of Esquire. The first personal dignity after the nobility is a knight of the order of St. George, or of the garter, first instituted by Edward III. A.D. 1344. Next (but not till after certain official dignities. as privy-counsellors, the chancellors of the ex-

chequer and duchy of Lancaster, the chief justice of the king's bench, the master of the rolls, and the other English judges,) follows a knight banneret; who indeed by statutes 5 Richard II. c. 4, and 14 Richard II., c. 11, is ranked next after barons; and his precedence before the younger sons of viscounts was confirmed by order of king James I. But to entitle him to this rank, he must have been created by the king in person, in the field, under the royal banners, in time of open war; else he ranks after baronets, who are the next in order; which title is a dignity of inheritance, created by letters patent, and usually descendible to the issue male. Next follow the knights of the Bath. The last of these inferior nobility are knights bachelors; the most ancient though the lowest order of knighthood amongst us. See BACHELOR. The above, with those enumerated under the article NOBILITY, Sir Edward Coke says, are all the names of dignity in this kingdom; Esquires and Gentlemen being only names of worship. But before these last the heralds rank all colonels, serjeants at law, and doctors of law, physic, and divinity.

DIGNO'TION, *n. s.* From Lat. *dignosco.* Distinction; distinguishing mark.

That temperament all *dignotions*, and conjecture of prevalent humours, may be collected from spots in our nails, we are not averse to concede.

Browne's Vulgar Errours.

DIGRESS', *v. n.* } Span. and Port *digre-*
DIGRESS'ION, *n. s.* } *dir*; Ital. *digredire*; Lat.
DIGRESS'IVE, *adj.* } *digrediri, digressus*, from *dis* and *gradior, gressus*, to step; to go aside from a road, or design; to wander; expatiate. Digressive is wandering.

Thy noble shape is but a form of wax,
Digressing from the valour of a man.

Shakspeare.

The *digression* of the sun is not equal; but, near the equinoctial intersections, it is right and greater; near the solstices, more oblique and lesser.

Browne's Vulgar Errours.

He, she knew, would intermix
Grateful *digressions*, and solve high dispute
With conjugal caresses. *Milton.*

The good man thought so much of his late conceived commonwealth, that all other matters were but *digressions* to him. *Sidney.*

In the pursuit of an argument, there is hardly room to *digress* into a particular definition, as often as a man varies the signification of any term. *Locke.*

Digressions in a book are like foreign troops in a state, which argue the nation to want a heart and hands of its own; and often either subdue the natives, or drive them into the most unfruitful corners.

Swift.

The excellence of this work is not exactness but copiousness. The wild diffusion of the sentiments, and the *digressive* sallies of imagination, would have been compressed and restrained by confinement to rhyme. *Johnson.*

DIGYNIA; from δις, twice, and γυνη, a woman; the name of an order in the first thirteen classes, except the ninth, in Linnæus's sexual method; consisting of plants, which have two female organs.

DII, the divinities of the ancient heathens, were very numerous. Every object which caused terror, inspired gratitude, or bestowed affluence, received the tribute of veneration. Man saw a superior agent in the stars, the elements, or the trees, and supposed that the waters which communicated fertility to his fields and possessions, were under the influence and direction of some invisible power inclined to favor and to benefit mankind. Thus arose a train of divinities which imagination arrayed in different forms and armed with different powers. They were supposed to be endowed with understanding, and actuated by the same passions which daily afflict the human race; and to be appeased or provoked, like the imperfect beings whose fears gave them birth. Their wrath was to be mitigated by sacrifices and incense; and sometimes human victims bled, and thus real crimes were committed, to expiate crimes, which superstition alone supposed to exist. The sun, from his powerful influence and animating nature, first claimed the adoration of the uncivilised inhabitants of the earth. The moon also was honored with sacrifices, and addressed in prayers; and after immortality had been liberally bestowed on all the heavenly bodies, mankind classed among their deities the brute creation, and the cat and the sow shared equally with Jupiter himself, the father of gods and men, the devout veneration of their votaries. This immense number of deities has been divided into different classes according to the fancy of the mythologists. The Romans generally reckoned two classes of the gods. Among the demi-gods, who were said to have merited immortality by the greatness of their exploits and services to mankind, were Vertumnus, Hercules, Jason, Castor, and Pollux, whose parents were some of the immortal gods. All the passions and moral virtues were also reckoned powerful deities, and temples were raised to the goddesses of concord, peace, &c. According to Hesiod, there were no less than 30,000 gods that inhabited the earth, and were guardians of men, all subservient to Jupiter. To these, succeeding ages added an almost equal number; and indeed they were so numerous, and their functions so various, that we find temples erected and sacrifices offered, to unknown gods. All the gods of the ancients were supposed to have once lived upon earth as mere mortals; and even Jupiter himself, the ruler of heaven, is represented by the mythologists as once a helpless child; and all the particulars, attending the birth and education of Juno, are recorded. In process of time, not only virtuous men, who had been the patrons of learning and the supporters of liberty, but also thieves and pirates, were admitted among the gods, and the Roman senate servilely granted immortality to the most cruel and worthless of their emperors.

DIJAMBUS, in Latin poetry, the foot of a verse of four syllables; it is compounded of two iambics, as sĕvērĭtas.

DIJON, or DIGON, an ancient and handsome city of France, a bishop's see, in the department of the Cote d'Or and ci-devant province of Burgundy. It has a university which has long been among the most celebrated and best regulated in France. The public structures, and particularly the churches, are very fine. In front of the ci-devant Place Royale, is the ancient palace of the

dukes of Burgundy; and at the gates of Dijon is a late Chartreuse founded in 1383, in which are some magnificent tombs of those princes. The Place Royale, in the form of a horse-shoe, is the principal part of the city. Among the churches worth notice are, that of St. Benigne, the spire of which has an elevation of 370 feet; the church of St. Michael, remarkable for the richness of its portal; that of St. Stephen, now the cathedral church; and the church of Notre Dame, esteemed one of the best models of Gothic architecture in Europe. Of the old monastic institutions, the richest was the Cistercian abbey, the origin of all of that order throughout Europe. Here is also a citadel built by Louis XI. The streets are well paved, and regular, and the houses in general neat and commodious; the population, including the suburbs, is 21,600. Here are manufactures of silk, cotton, and wool, the trade in which has been much improved by the recent construction of a canal from this place to St. Jean de Loire. Three great annual fairs are held here: March 10th, June 14th, and November 10th, lasting eight days each. Dijon is built on an oval plan and seated in a pleasant plain, which produces excellent wine, between two small rivers, forty-eight miles north-east of Autun, 100 miles north of Lyons, and 175 south-east of Paris; contains professorships of theology, philosophy, mathematics, Latin, German, history, rhetoric, eloquence and poetry. Here are also a drawing school, a library of 4000 volumes, a museum of paintings and engravings, and a theatre. The academy of sciences was founded in 1725. Among the eminent characters of Dijon, may be mentioned the celebrated Bossuet, and the poets Crebillon and Piron. It has several public walks; of which the most frequented are the ramparts.

DIJUDICA'TION, *n. s.* Lat. *dijudicatio.* Judicial distinction.

DIKE, *n. s.* Goth and Swed. *dike;* Saxon, dic; Erse *dyk;* Fr. *digue;* from Gr. τειχος; Heb. דיק a wall, or mound. A boundary of lands made by water, and often by embankments on the side; a channel for water.

God, that breaks up the flood-gates of so great a deluge, and all the art and industry of man is not sufficient to raise up *dykes* and ramparts against it. *Cowley.*

The *dykes* are filled, and with a roaring sound
The rising rivers float the nether ground.
Dryden's Virgil.

The king of *dykes!* than whom no sluice of mud
With deeper sable blots the silver flood.
Pope's Dunciad.

DIKE denotes also a ditch or drain, made for the passage of waters. The word seems formed from the verb to dig; though others derive it from the Dutch diik, or dyke, a dam, sea-bank, or wall.

DIKE, or dyke, is a work of stone, timber, or fascines, raised to oppose the entrance or passage of the waters of the sea, a river, lake, or the like.

DILAC'ERATE, *v. a* } Lat. *dilacero.* To
DILACERA'TION *n. s.* } tear; to rend; to force in two.

The infant, at the accomplished period, struggling to come forth, *dilacerates* and breaks those parts which restrained him before. *Browne's Vulgar Errours.*

The greatest sensation of pain is by the obstruction of the small vessels, and *dilaceration* of the nervous fibres. *Arbuthnot.*

DILA'NIATE, *v. a.* Lat. *dilanio.* To tear; to rend in pieces.

Rather than they would *dilaniate* the entrails of their own mother, and expose her thereby to be ravished, they met half way in a gallant kind. *Howel's Eng. Tears.*

DILAP'IDATE, *v. n.* } Lat. *dilapido.* To
DILAP'IDATION, *n. s.* } go to ruin; to fall by decay. The incumbent's suffering the chancel, or any other edifices of his ecclesiastical living, to go to ruin or decay, by neglecting to repair the same: it likewise extends to his committing, or suffering to be committed, any wilful waste in or upon the glebe-woods, or any other inheritance of the church. (Ayliffe's Parergon.) This word has also been applied generally of late.

'Tis the duty of all church-wardens to prevent the *dilapidations* of the chancel and mansion-house belonging to the rector or vicar. *Ayliffe.*

DILATE', *v. a.* & *v. n.* } Fr. *dilater;* Span.
DILA'TABILITY, *n. s.* } *dilatar;* Ital. & Lat.
DILA'TABLE, *adj.* } *dilatare,* from *de* and
DILATA'TION, *n. s.* } *latus;* Gr. πλατος,
DILA'TOR. } broad, from Heb. פלט, to set at large. To extend; spread out; enlarge; hence to relate at length or diffusely: as a neuter verb, to widen; speak largely. Dilatability is admitting of extension. Dilatation, the act of extending, or state of being extended.

But ye thereby much greater glory gate,
Than had ye sorted with a prince's peer;
For now your light doth more itself *dilate,*
And in my darkness greater doth appear.
Spenser.

But he would not endure that woful theam
For to *dilate* at large. *Faerie Queene.*

Do me the favour to *dilate* at full
What hath befallen of them, and thee, till now.
Shakspeare.

Joy causeth a cheerfulness and vigour in the eyes; singing, leaping, dancing, and sometimes tears: all these are the effects of the *dilatation,* and coming forth of the spirits into the outward parts. *Bacon's Natural History.*

It may be behoveful for princes, in matters of grace, to transact the same publickly, and by themselves; or their ministers to *dilate* upon it, and improve their lustre, by any addition or eloquence of speech. *Clarendon.*

Satan alarmed,
Collecting all his might, *dilated* stood,
Like Teneriff, or Atlas, unremoved. *Milton.*

The motions of the tongue, by contraction and *dilatation,* are so easy and so subtle, that you can hardly conceive or distinguish them aright. *Holder.*

We take notice of the wonderful *dilatability* or extensiveness of the gullets of serpents: I have taken wo adult mice out of the stomach of an adder, whose neck was not bigger than my little finger. *Ray.*

Diffused, it rises in a higher sphere;
Dilates its drops, and softens into air. *Prior.*

His heart *dilates* and glories in his strength,
Addison.

The second refraction would spread the rays one way as much as the first doth another, and so *dilate* the image in breadth as much as the first doth in length. *Newton.*

The windpipe divides itself into a great number of branches called bronchia: these end in small air-bladders, *dilatable* and contractible, capable to be inflated by the admission of air, and to subside at the expulsion of it. *Arbuthnot on Aliments.*

The buccinatores, or mowers up of the cheeks, and the *dilators* of the nose, are too strong in cholerick people. *Id.*

This fluid may possibly be the same with that which, being attracted by and entering into other more solid matter, *dilates* the substance, by separating the constituent particles, and so rendering some solids fluid, and maintaining the fluidity of others.
Franklin.

Here, there, he points his threatening front, to suit
His first attack, wide waving to and fro
His angry tail; red rolls his eyes, *dilated* glow.
Byron.

DILATATION, in physics, a motion of the parts o. any body, by which it is so expanded as to occupy a greater space. This expansive motion depends upon the elastic power of the body; whence it appears that dilatation is different from rarefaction, this last being produced by the means of heat.

DILATORY PLEAS, in law, are such as are put in merely for delay, and there may be a demurrer to a dilatory plea, or the defendant shall be ordered to plead better, &c. The truth of dilatory pleas is to be made out by affidavit of the fact, by stat. 4 and 5 Anne.

DILATRIS, in botany, a genus of the monogynia order, and triandria class of plants: CAL. none: COR. has six petals, and is shaggy; the stigma simple. Species three; all natives of the Cape.

DIL'ATORY, *adj.* Fr. *dilatoire;* Lat. *dilatorius.* See DILATE. (For a dilatory person spreads or extends his work.) Slow; delaying; tardy.

These cardinals trifle with me: I abhor
This *dilatory* sloth, and tricks of Rome.
Shakspeare. Henry VIII.

An inferior council, after former tedious suits in a higher court, would be but *dilatory*, and so to little purpose. *Hayward.*

All promise is poor *dilatory* man,
And that through every stage. *Young.*

A *dilatory* temper commits innumerable cruelties without design. *Addison's Spectator.*

DILECTION, *n. s.* Lat. *dilectio.* The act of loving; kindness.

So free is Christ's *dilection*, that the grand condition of our felicity is our belief.
Boyle's Seraphic Love.

DILEM'MA. Fr. *dilemme;* Lat. *dilemma;* Gr. διλημμα, from δις and λημμα, an assumption, ὁ λαμβανω, to take. An argument or sophism capable, apparently, of two equally correct, but opposite conclusions.

A *dilemma*, that Morton used to raise benevolence, some called his fork, and some his crotch.
Bacon's Henry VII.

Quoth he, in all my past adventures
I ne'er was set so on the tenters,
Or taken tardy with *dilemma*,
That every way I turn does hem me.
Hudibras

Hope, whose weak being ruined is
Alike if it succeed, and if it miss;
Whom good or ill does equally confound,
And both the horns of fate's *dilemma* wound.
Cowley.

A dire *dilemma;* either way I'm sped;
If foes they write, if friends they read, me dead.
Pope.

DIL'IGENCE, *n. s.* } Fr. *diligént;* Span., Port., and Ital. *dilígente;* Lat. *diligens*, from *diligere*, to favor (work). Industry; constancy in business; continued application. Hence a name, not seldom misapplied, of stage coaches.
DIL'IGENT, *adj.* }
DIL'IGENTLY, *adv.* }

Seest thou a man *diligent* in his business, he shall stand before kings. *Prov.* xxii. 29.

Brethren, give *diligence* to make your calling and election sure. 2 *Pet.* i. 10.

Still when she slept he kept both watch and ward;
And when she wakt he wayted *diligent*,
With humble service to her will prepard.
Spenser. Faerie Queene.

If you inquire not attentively and *diligently*, you shall never be able to discern a number of mechanical motions. *Bacon.*

But the power of nature is only the power of using to any certain purpose the materials which *diligence* procures, or opportunity supplies. *Johnson.*

Now, who would have suspected your friend Miss Prim of an indiscretion? Yet such is the illnature of people, that they say her uncle stopped her last week, just as she was stepping into the York *diligence* with her dancing master. *Sheridan.*

DILL, *n. s.* Sax. ᵹile; Pers. *dilee*, from *dil*, the heart, a cordial. It hath a slender, fibrous, annual root; the leaves are like those of fennel; the seeds are oval, plain, streaked, and bordered.

Dill is raised of seed, which is ripe in August.
Mortimer.

DILLEMBURG, or DILLENBURG, a town of Germany, in Westphalia, and capital of Nassau Dillenburg, situated on the Dille. Near it is a furnace for the smelting of copper. The sovereignty of this town was added to the grand duke of Berg, by the late treaty of confederation between the states of the Rhine. It is fourteen miles north-west of Wetzlar. Long. 8° 22′ E., lat. 50° 36′ N.

DILLINGEN, a neat town of Bavaria, on the left bank of the Danube, with a university or lyceum. The bishop of Augsburg resided here formerly, and it is still a bishop's see. It contains a chapter and three convents; and was formerly a county; the princes of which were powerful. Near this town Louis XVIII. was fired at, and wounded in the forehead, by some unknown assassin, July 12th, 1796. Population 3120. It is twenty-three miles north-east of Augsburg and twenty-four north-east of Ulm.

DILLENIA, in botany, a genus of the polygynia order, and polyandria class of plants: CAL. pentaphyllous; the petals five: CAPS. nu-

merous, polyspermous, coalited and full of pulp. Species eight; all Indian plants.

DILLENIUS (John James), an eminent botanist, born at Darmstadt in Germany, in 1687, and educated at the university of Gieffen. He contributed several curious papers to the Miscellanea Curiosa, and, in 1721, accompanied Dr. Sherard to England, where he spent the remainder of his days. Soon after his arrival he undertook a new edition of Ray's Synopsis Stirpium Britannicarum. He was appointed the first botanical professor at Oxford, on Dr. Sherard's foundation, and in 1735 the university admitted him to the degree of M. D. He died in 1747. He published an elaborate work, entitled Hortus Elthamensis, and also a History of Mosses.

DILLON (Wentworth), earl of Roscommon, a British poet of celebrity, was the son of James, earl of Roscommon, by a sister of the earl of Strafford. Though born in Ireland (in 1633) he received his education at lord Strafford's seat in Yorkshire, and finally entered the Protestant university of Caen in Normandy, under the celebrated Bochart. After travelling into Italy he returned, soon after the Restoration, to England, and was made captain of the band of pensioners. He now ruined his estate by gaming; and, being involved also in quarrels, he returned to Ireland, where his property lay. Here, however, he followed nearly the same course as in England, until his marriage with a daughter of the earl of Burlington. He now appears to have cultivated letters, and to have reformed himself. He projected, among other modes of promoting literature, an academy for improving and fixing the English language; but the scheme was never accomplished. On the accession of James II. he visited Italy, and took up his residence at Rome, where he died of the gout in 1684. Lord Roscommon was not a voluminous writer, his principal piece being a poetical Essay on Translated Verse, in which he lays down the rules that ought to govern translations. Other poems of this writer are translations of Horace's Art of Poetry, of Virgil's sixth Eclogue, of the Dies Iræ, of a scene in Pastor Fido, &c. Dr. Johnson calls him the most correct writer of English verse before Dryden; and Pope has said of him, addressing a poet of rather different character,

> Unhappy Dryden! in all Charles's days,
> Roscommon only boasts unspotted lays.

DILU'CIDATE, *v. a.* / DILU'CID, *adj.* / DILUCIDA'TION, *n. s.* From Lat. *dilucidare*. To make clear, or plain; to explain; to free from obscurity.

I shall not extenuate, but explain and *dilucidate*, according to the custom of the ancients. *Browne's Vulgar Errours.*

DILUTE', *v. a.* & *adj.* / DILU'TER, *n. s.* / DILU'TION, / DILU'ENT. From Lat. *diluo*, *de* and *luo*, Gr. λυω (Heb. בלה, to waste) to wash. To make thin or fluid-like; to weaken; make vapid. Dilution is the act of making thin or weak, or the thing so made.

Drinking a large dose of *diluted* tea, as she was ordered by a physician, she got to bed. *Locke.*

If the red and blue colours were more *dilute* and weak, the distance of the images would be less than an inch; and if they were more intense and full, that distance would be greater. *Newton.*

Water is the only *diluter*, and the best dissolvent of most of the ingredients of our aliment. *Arbuthnot on Aliments.*

There is no real *diluent* but water: every fluid is *diluent*, as it contains water in it. *Id.*

Opposite to *dilution* is coagulation, or thickening, which is performed by dissipating the most liquid parts by heat, or by insinuating some substances, which make the parts of the fluid cohere more strongly. *Id.*

DILU'VIAN, *adj.* From Lat. *diluvium*, *de* and *luo*, to wash. Relating to the deluge.

Suppose that this *diluvian* lake should rise to the mountain tops in one place, and not diffuse itself equally into all countries about. *Burnet's Theory.*

DIM, *v. a.* & *adj.* / DIM'ISH, *adj.* / DIM'ISHLY, *adv.* / DIM'ISHNESS, *n.s.* Goth. *dimma*; Sax. *dimme*; Swed. *dimm*; Welsh *dy*; Erse *dow*. According to Minsheu from δειμος, fear, because the dark occasions fear. To becloud; darken; make less bright, or obscure: as an adjective, somewhat dark; and hence not seeing clearly; dull. Dimish is a diminutive of dim.

When Isaac was old his eyes were *dim* that he could not see. *Gen.* xxvii. 1.

> The statu of Mars began his hauberke ring,
> And with that sound he herd a murmuring
> Full low and *dym*, that saied, 'Victory!'
> *Chaucer.*

> And her fair eyes, like stars that *dimmed* were
> With darksome cloud, now shew their goodly beams.
> *Spenser.*

> As where the Almighty's lightning brand does light,
> It *dims* the dazed eyen, and daunts the senses quite. *Id. Faerie Queene.*

> All of us have cause
> To wail the *dimming* of our shining star.
> *Shakspeare. Richard III.*

It hath been observed by the ancients, that much use of Venus doth *dim* the sight; and yet eunuchs, which are unable to generate, are nevertheless also *dim* sighted. *Bacon.*

Thus while he spake, each passion *dimmed* his face, Thrice changed. *Milton.*

> Unspeakable! who sittest above these heavens,
> To us invisible, or *dimly* seen,
> In these thy lowest works *Id.*

In the beginning of our pumping the air, the match appeared well lighted, though it had almost filled the receiver with fumes; but by degrees burnt more and more *dimly*. *Boyle's Spring of the Air.*

The principal figure in a picture is like a king among his courtiers, who *dims* all his attendants. *Dryden.*

Every one declares against blindness, and yet who almost is not fond of that which *dims* his sight? *Locke.*

> 'Tis true, but let it not be known,
> My eyes are somewhat *dimish* grown;
> For nature, always in the right,
> To your decays adapts my sight. *Swift.*

> For thee I *dim* these eyes, and stuff this head,
> With all such reading as was never read.
> *Pope's Dunciad.*

Add to all these improvements backwards another modern fancy, that *grey* printing is more beautiful than black. Hence the English new books are printed in so *dim* a character, as to be read with difficulty by old eyes, unless in a very strong light, and with good glasses. *Franklin.*

But when the fading eye grows *dim*,
And fails each faint and wasted limb,
And short and frequent pantings show
The sad disease that lurks below. *Bowdler.*

I linger yet with Nature, for the night
Hath been to me a more familiar face
Than that of man; and in her starry shade
Of *dim* and solitary loveliness,
I learned the language of another world. *Byron.*

DIMACHÆ; from δις, double, and μαχω, I fight; in antiquity, a kind of horsemen, first instituted by Alexander. Their armour was lighter than that of the infantry, and at the same time heavier than that used by horsemen, so that they could act as horse or foot as occasion required.

DIMCHURCH, or DINCHURCH, a village of England, in Kent, situated by the side of a strong dyke, called Dimchurch Wall, between Romney and Hythe, made to prevent the encroachments of the sea, with a road on the top which is mostly wide enough for carriages to pass each other. Here are kept the records of the Romney Marsh; and the court is held here by the lords of the Marsh and the members of the corporation, to regulate all affairs concerning it It is four miles and a half N. N. E. of New Romney, and four and a half S. S. W. of Hythe.

DIMEN'SION, *n. s.* } Fr. and Span. *dimension*; Ital. *dimensione*; Lat. *dimensio*; *de* and *mensio*, from *metior*, Gr. μετρεω, to measure. Extent; capacity; solid contents. Dimensionless is used by Milton for without bulk. Dimensive is marking the boundary or dimensions.
DIMEN'SIONLESS, *adj.*
DIMEN'SIVE.

Wherefore base
When my *dimensions* are as well compact,
My mind as generous, and my shape as true,
As honest Madam's issue? *Shakspeare.*

All bodies have their measure, and their space
But who can draw the soul's *dimensive* lines?
Davies.

In they passed
Dimensionless through heavenly doors. *Milton.*

My gentleman was measuring my walls, and taking the *dimensions* of the room. *Swift.*

To judge rightly of our own worth, we should retire a little from the world, to see its pleasures, and pains too, in their proper size and *dimensions*. *Sterne.*

Thus mingled still with wealth and state,
Crœsus himself can never know;
His true *dimensions* and his weight
Are far inferior to their show. *Watts.*

DIMENSION, in geometry, is either length, breadth, or thickness; hence a line has one dimension, viz. length; a superficies two, viz. length and breadth; and a body or solid has three, viz. length, breadth, and thickness.

DIMICA'TION, *n. s.* Lat. *dimicatio*. A battle; the act of fighting; contest.

DIMIDIA'TION, *n. s.* Lat. *dimidiatio*. The act of halving; division into two equal parts.

DIMIN'ISH, *v. a. a.* & *n.* } Fr. *diminuer*; Ital. *diminuire*; Span. and Port. *diminuyr*; Lat. *diminuere*, *di* and *minuo*. To make less; to impair; take from in any way; degrade: as a neuter verb, to grow less; be impaired or degraded. Diminutive, as a substantive, and diminutiveness, express littleness. Diminutive also means, that makes little; any thing small.
DIMIN'ISHINGLY, *adj.*
DIMINU'TION, *n. s.*
DIMIN'UTIVE, *n. s.* & *adj.*
DIMIN'UTIVELY, *adv.*
DIMIN'UTIVENESS, *n. s.*

Ye shall not add unto the word which I command you, neither shall you *diminish* aught from it. *Deut.* iv. 2.

The poor wren,
The most *diminutive* of birds, will fight,
Her young ones in her nest, against the owl.
Shakspeare. Macbeth.

Follow his chariot; monster-like, be shown
For poor'st *diminutives*, for doits! *Shakspeare.*

The one is not capable of any *diminution* or augmentation at all by men; the other apt to admit both. *Hooker.*

He afterwards proved a dainty and effeminate youth, was commonly called, by the *diminutive* of his name, Peterkin or Perkin. *Bacon's Henry VII.*

Make me wise by thy truth, for my own soul's salvation, and I shall not regard the world's opinion or *diminution* of me. *King Charles.*

Impiously they thought
Thee to *diminish*, and from thee withdraw
The number of thy worshippers. *Milton.*

O thou that with surpassing glory crowned
Look'st from thy sole dominion like the God,
Of this new world; at whose sight all the stars,
Hide their *diminished* heads. *Id.*

Sim, while but Sim, in good repute did live;
Was then a knave, but in *diminutive*. *Cotton.*

What judgment I had, increases rather than *diminishes*; and thoughts, such as they are, come crowding in so fast upon me, that my only difficulty is to chuse or to reject. *Dryden.*

The light of man's understanding is but a short, *diminutive*, contracted light, and looks not beyond the present. *South.*

Finite and infinite seem to be looked upon as the modes of quantity, and to be attributed primarily to those things which are capable of increase or *diminution*. *Locke.*

I never heard him censure, or so much as speak *diminishingly*, of any one that was absent. *Id.*

The gravitating power of the sun is transmitted through the vast bodies of the planets without any *diminution*, so as to act upon all their parts, to their very centres, with the same force, and according to the same laws, as if the part upon which it acts were not surrounded with the body of the planet. *Newton.*

They know how weak and aukward many of those little *diminutive* discourses are. *Watts.*

Crete's ample fields *diminish* to our eye;
Before the Boreal blasts the vessels fly.
Pope's Odyssey.

Security *diminishes* the passions; the mind, when left to itself, immediately languishes. *Hume.*

Check then the solicitations of the flesh; and dare to do nothing that may *diminish* thy native excellence, dishonour thy high original, or degrade thy noble nature. *Mason.*

Thence with what pleasure have we just discerned
The distant plough, slow moving, and beside
His labouring team, that swerved not from the track,
The sturdy swain *diminished* to a boy. *Cowper.*

DIM'ISSORY, *adj.* Lat. *dimissorius.* That by which a man is dismissed to another jurisdiction.

A bishop of another diocess ought neither to ordain or admit a clerk, without the consent of his own proper bishop, and without the letters *dimissory*. *Ayliffe.*

DIMISSORY LETTERS, literæ dimissoriæ, in the canon law, a letter given by a bishop to a candidate for holy orders, having a title in his diocess, directed to some other bishop, and giving leave for the bearer to be ordained by him. When a person produces letters of ordination or tonsure, conferred by any other than his own diocesan, he must at the same time produce the letters dimissory given by his own bishop, on pain of nullity. Letters dimissory cannot be given by the chapter, sede vacante; this being deemed an act of voluntary jurisdiction, which ought to be reserved to the successor.

DI'MITY, *n. s.* A fine kind of fustian, or cloth of cotton.

I directed a trowze of fine *dimity*. *Wiseman.*

DIM'PLE, *n. s.* & *v. n.* } Dint, a hole; din-
DIM'PLED, *adj.* } tle, a little hole; by
DIMP'LY, *adv.* } a careless pronunciation made dimple, says Skinner. A small hollow, or depression, often applied to the face.

On each side her
Stood pretty *dimpled* boys like smiling cupids. *Shakspeare.*

By *dimpled* brook, and fountain brim,
The wood-nymphs decked with daisies trim
Their merry wakes and pastimes keep:
What hath night to do with sleep? *Milton.*

The wild waves mastered him, and sucked him in,
And smiling eddies *dimpled* on the main. *Dryden.*

As the smooth surface of the *dimply* flood
The silver-slippered virgin lightly trod. *Warton's Isis.*

In her forehead's fair half round,
Love sits in open triumph crowned;
He in the *dimple* of her chin,
In private state, by friends is seen. *Prior.*

The *dimple* [laugh] is practised to give a grace to the features, and is frequently made a bait to entangle a gazing lover. *Steele.*

How frail is Beauty's bloom!
The *dimpled* cheek—the sparkling eye—
Scarce seen, before their wonders fly
To decorate a tomb. *Robinson.*

DIMŒRITÆ; from δια, and μοιραω, to divide; a name given to the Apollinarists, who at first held that Christ only assumed a human body without taking a reasonable soul; but, being at length convinced by texts of Scripture, they allowed that he did assume a soul, but without understanding, the Word supplying that faculty. From this way of separating the understanding from the soul they were denominated Dimœritæ, or separaters.

DIMOTUC, a town of European Turkey, in Romania, with a Greek archbishop's see. It is seated on a mountain surrounded by the river Meriza, twelve miles south-west of Adrianople Long. 26° 15′ E., lat. 41° 35′ N.

DIMSDALE (Thomas), a celebrated English physician, the son of a surgeon at Theydon Garnon in Essex, where he was born in 1712. He studied some time at St. Thomas's Hospital, London; and, about 1734, commenced practitioner at Hertford. In 1745 he accompanied the army under the duke of Cumberland as assistant surgeon, and continued in that capacity till Carlisle had surrendered to the royal army, when he returned to Hertford. In 1761 he took the degree of M. D., commenced physician, and became celebrated by his successful mode of inoculating for the small pox. He published a treatise on it in 1767, which was quickly translated, and circulated all over the continent. His fame as a skilful practitioner occasioned his being invited to Russia to inoculate the empress Catherine and her son, in 1768, for which he was appointed counsellor of state and physician to her imperial majesty, with an annuity of £500: he was at the same time created a baron of the Russian empire, and the same title was conferred on his son. At Moscow he inoculated also a considerable number of the people; but refused the invitation of the empress to reside in Russia as her physician, and after being admitted, at Sans Souci, to a private audience of Frederic II. king of Prussia, he returned to England. In 1780 he was elected M. P. for the borough of Hertford; upon which he declined his practice, except for the relief of the poor. In 1781 he again visited Russia to inoculate the late emperor Alexander and his brother, in which he experienced the same success as before. On his resignation, in 1790, his son Nathanael was elected representative of the borough of Hertford. Baron Dimsdale died at Hertford, after a short illness, in 1800.

DIN, *v. a.* & *n. s.* Sax. ðyn, from ðynan, to make a noise; Ice. *dyna*, to thunder. To sun with a noise; stupify; overpower with clamour; the noise made.

And all the way he roared as he went,
That all the forest with astonishment
Thereof did tremble, and the beasts therein
Fled fast away from that so dreadful *din*. *Hubberd's Tale.*

O, 'twas a *din* to fright a monster's ear;
To make an earthquake: sure, it was the roar
Of a whole herd of lions. *Shakspeare.*

Now night, over heaven
Inducing darkness, grateful truce imposed,
And silence on the odious *din* of war. *Milton.*

Rather live
To bait thee for his bread, and *din* your ears
With hungry cries. *Otway.*

Some independent ideas, of no alliance to one another, are, by education, custom, and the constant *din* of their party, so coupled in their minds, that they always appear there together, and they can no more separate them in their thoughts than if they were but one idea, and they operate as if they were so. *Locke.*

What shall we do if his majesty puts out a proclamation commanding us to take Wood's halfpence? This hath been often *dinned* in my ears. *Swift.*

Nature's eye is melancholy
O'er the city high and holy:

But without there is a *din*
Should arouse the' saints within,
And revive the heroic ashes
Round which yellow Tiber dashes. *Byron.*

DINAGEPORE, a district of Bengal, situated between the twenty-fifth and twenty-sixth degrees of northern latitude. It is bounded on the north and west by Purneah, on the east by Rungpore and Ghoragot, and on the south by Bettooriah. The soil is much diversified, and the general face of the country is divided into small valleys of two or three miles broad. These are watered by rivers, which, in the rainy seasons, inundate the low lands and swell into large lakes fifty or sixty miles long, till the falling of the Ganges permits the water to retire, after which these lowlands are covered with luxuriant pasture, and are capable of producing abundant crops of rice. The soil does not answer for grain, but indigo, tobacco, and hemp are cultivated successfully, It is on the whole, however, one of the poorest districts of Bengal. Three-fourths of the inhabitants are Hindoos.

DINAGEPORE, or Rajigunge, the capital of the above district, is situated on an island formed by the Pernabubah, and is the residence of the rajah. It is a considerable place of trade.

DINAH; Heb. דינה, i. e. judgment; the only daughter of the patriarch Jacob. Her misfortune with the prince of Shechem; his honorable proposal of repairing the injury by marriage; and the prevention of the fulfilment of his generous intention by the treachery and barbarity of her bloody brethren, Simeon and Levi, are recorded in Gen. xxxiv See LEVI.

DINAN, or DINANT, a town of the department of the Cotes du Nord, Brittany, containing manufactures of cotton, linen, and flannel, and about 4200 inhabitants. It is surrounded with walls, and has an old castle, situated on the river Rance, a few miles from the sea. The small harbour is about thirteen miles south of St. Malo.

DINAPORE, a town, or rather a military cantonment, belonging to the British, situated on the southern bank of the river Ganges, in the province of Bahar, eleven miles and a half west of the city of Patna, for the defence of which it was constructed, in the year 1767. It consists of two handsome brick squares that will contain 1200 men, and superior barracks for the European officers. 'The officers,' says Mr. Hamilton, 'have more accommodations than in any barracks in England; and the private soldiers of the European regiments are provided with large and well aired apartments. The native soldiers are quartered in small huts, which to them is no hardship. The magazine built by Mr. Hastings has had £15,000 expended on it. In the vicinity is an excellent house in the European style, built by the soudah Ali, nabob of Oude.

DINDIGUL, or DANDIGALA, a district in the south of India, situated between the tenth and eleventh degrees of north latitude. It is bounded on the north by Coimbetoor and Kistnagherry, on the east by the Polygar territory and Madura, on the south by Travancor and Madura, and on the west by Travancor, Cochin, and Malabar. The principal rivers are the Noil and the Amravati; and the chief towns Dindigul, Balny, and Palapetty. Particular inhabitants are here in the enjoyment of a portion of land, rent free, and the hereditary occupiers of the rest. This district was ceded to the British by Tippoo, in 1792, and, together with Madura, the Manapara Pollams, Ramnad, and Shevagunga, now forms one of the collectorships of the Madras presidency. The Dindigul districts and sequestered pollams have been converted into forty zemindaries.

DINDIGUL, the capital of the district of the same name, in southern India; has a fort, situated on a strong rock, in the midst of a plain, which is bounded on the west by the great range of mountains which separates it from the coast of Malabar, and on the east by a lower range, which runs between it and the district of Madura. This place was taken in 1755 by the Mysore rajahs, and by the British army in May, 1783, but restored to Tippoo at the peace of 1784. Travelling distance from Seringapatam 198 miles, from Madras 275 miles.

DINDYMA, or DINDYMUS, a mountain or ridge, allotted by many to Phrygia. Strabo mentions two mountains of this name, one in Mysia, near Cyzicus, the other in Gallogræcia, near Pessinûs, and none in Phrygia. Ptolemy extends this ridge from the borders of Troas, through Phrygia to Gallogræcia: though, therefore, there were two mountains called Dindymus in particular, both sacred to the mother of the gods, and none of them in Phrygia Major, yet there might be several hills and eminences in it, on which this goddess was worshipped, and therefore called Dindyma in general.

DINE, *v. a.* & *v. n.* } Fr. *diner*, to take the
DI'NING-ROOM, *n. s.* } day-meal, from Sax.
DIN'NER, } dægnan, a day. See
DIN'NER-TIME. } DAY. To give the day, or principal, meal to. To feed; to eat that meal. The dining-room, dinner, and dinner-time, are in this country well understood.

Pernaps some merchant hath invited him,
And from the mart he's somewhere gone to *dinner*:
Good sister let us *dine*, and never fret. *Shakspeare.*

At *dinner-time*,
I pray you have in mind where we must meet.
Id.

He would *dine* with him the next day.
Clarendon.

Before *dinner* and supper, as often as it is convenient, or can be had, let the public prayers of the church, or some parts of them, be said publicly in the family. *Taylor.*

The apartments within were very splendid, especially the *dining-room*; and many other of the rooms were well adorned with mouldings and fret-work; some of whose marble clavils were so delicately fine, that they would reflect an object true and lively from a great distance. *Fuller. Worthies of Devon.*

Boil this restoring root in generous wine,
And set beside the door the sickly stock to *dine*.
Dryden.

Thus, of your heroes and brave boys,
With whom old Homer makes such noise,
The greatest actions I can find,
Are, that they did their work and *dined*.
Prior.

Then from the mint walks forth the man of rhyme,
Happy to catch me just at *dinner-time*. *Pope.*

On carcasses of every kind,
This man hath elegantly *dined*. *Gay.*

DINET'ICAL, *adj.* Δινητικος. Whirling round; vertiginous.

Some of late have concluded, from spots in the sun, which appear and disappear again, that, besides the revolution it maketh with its orbs, it hath also a *dinetical* motion, and rolls upon its own poles.
Browne's Vulgar Errours.

A spherical figure is most commodious for *dinetical* motion, or revolution upon its own axis. *Ray.*

DING. Goth. *denga;* Sax. dengan; Dutch *dringen*, to beat about. To dash violently; to bluster; bounce.

Let us all ring fancy's knell;
Ding, dong bell. *Shakspeare.*

He huffs and *dings*, because we will not spend the little we have left, to get him the title of lord Strut.
Arbuthnot.

DINGELFINGEN, a well-built old town of Lower Bavaria, situated on the Iser, in the circle of the Danube, and containing 2080 inhabitants. It is divided into the upper and lower towns; the former standing on a steep eminence, communicating with the hills by a sort of dry aqueduct. It is eighteen miles north-east of Landshut, and forty-eight north-east of Munich.

DIN'GLE, *n. s.* From Sax. ðen, or ðin, a hollow. A hollow between hills; a dale.

I know each lane, and every alley green,
Dingle or bushy dell of this wild wood;
And every bosky bourn from side to side,
My daily walks and ancient neighbourhood.
Milton.

DINGLE, in geography, a sea-port of Ireland, in Kerry, Munster, seated on the north side of a bay, and formerly a place of great trade, particularly with Spain. Several of the houses are built in the Spanish fashion, with ranges of stone balcony windows. It is a borough, and sent two members to the Irish parliament. It is twenty-four miles W.S.W. of Tralee, and 166 of Dublin.

DINGWALL, an ancient and flourishing royal borough, in the county of Ross, Scotland, erected by king Alexander II., in 1226. Its charter of that date was confirmed and renewed by James IV., and the inhabitants empowered to elect a provost, two baillies, dean of guild, treasurer, and ten counsellors. It joins with Kirkwall, Wick, Dornoch, and Tain, in sending a representative to the British parliament. From the remains of some old causeways, Dingwall appears to have been anciently much more extensive than it is now. The ruins of its castle are still to be seen, consisting of 'stones so strongly cemented with mortar that it is easier to break a solid rock than to separate those of which it is composed.' It was surrounded with a deep ditch, and a regular glacis remains. The town has been much enlarged and improved, and a considerable inland trade is carried on in it. It lies eighteen miles west of Cromarty, and is seated on the Frith.

DINOCRATES, a celebrated architect of Macedonia, who rebuilt the temple of Ephesus, when burnt by Erostratus, with much more magnificence than before. Vitruvius informs us, that Dinocrates proposed to Alexander the Great to convert mount Athos into the figure of a man, whose left hand should contain a walled city, and all the rivers of the mount flow into his right, and from thence into the sea! He also conceived a scheme for building the dome of the temple of Arsinoe at Alexandria, of loadstone, that should, by its attraction, uphold her iron image in the centre, suspended in the air.

DINT, *v. a.* & *n. s.* Sax. ðynt; Goth. *dunt*, a blow; a stroke. To give a blow that marks or indents: the blow given; force.

Much daunted with that *dint*, her sense was dazed;
Yet, kindling rage, herself she gathered round.
Spenser.

A gentle knight was pricking on the plaine
Ycladd in mighty arms and silver shielde,
Wherein old *dints* of deepe wounds did remaine,
The cruel marks of many 'a bloody fielde.
Spenser. Faerie Queene.

Leave, leave, fair bride, your solitary bone,
No more shall you return to it alone;
It nurseth sadness; and your body's print,
Like to a grave, the yielding down doth *dint*.
Donne.

Now you weep; and I perceive you feel
The *dint* of pity. *Shakspeare. Julius Cæsar.*

Neither vainly hope
To be invulnerable in these bright arms,
Though tempered heavenly; for that mortal *dint*,
Save he who reigns above, none can resist.
Milton.

Deep-*dinted* wrinkles on her cheeks she draws;
Sunk are her eyes, and toothless are her jaws.
Dryden's Æneid.

We are to wrest the whole Spanish monarchy out of the hands of the enemy; and, in order to it, to work our way into the heart of his country by *dint* of arms. *Addison.*

Fast by the rock, all menacing but mute,
He stood; and save a light beat of his foot,
Which deepened now and then the sandy *dint*
Beneath his heel, his form seemed turned to flint.
Byron.

DINUMERATION, *n. s.* Lat. *dinumeratio*. The act of numbering out singly.

DIO, surnamed Chrysostom, (golden mouth), a celebrated orator and philosopher of Greece, in the first century, born at Prusa, in Bithynia. He attempted to persuade Vespasian to quit the empire; and Domitian was so offended at his freedom of speech that he would have put him to death had he not fled into Thrace. After the death of that tyrant Dio returned to Rome, and acquired the esteem of Trajan, who made him ride with him in his triumphal chariot. There are still extant eighty of Dio's Orations, and some other of his works,—the best edition of which is that of Samuel Raimarus, in 1750, in folio.

DI'OCESS, *n. s.* } Gr. δια, and οικησις,
DIOC'ESAN, *n. s.* & *adj.* } or see the article following. The circuit of a bishop's jurisdiction: diocesan is the bishop administering therein.

None ought to be admitted by any bishop, but such as have dwelt and remained in his *diocess* a convenient time. *Whitgift.*

One younger man amongst the rest would take upon him to defend that every *diocesan* bishop was pope. I answered him with some scorn.

Bp. Hall's Hard Measure.

Although he (the bishop) had not all the *diocess* actually in communion and subjection, yet his charge, his *diocess* was so much. Just as with the Apostles, to whom Christ gave all the world for a *diocess*, yet at first they had but a small congregation. *Bishop Taylor.*

I have heard it has been advised by a *diocesan* to his inferior clergy, that they should read some of the most celebrated sermons printed by others.

Tatler.

This realm has two divisions, one into shires or counties, in respect of temporal policy; another into *dioceses*, in respect of jurisdiction ecclesiastical.

Cowell.

Oblige him to a longer residence in his *diocese* than is usually practised, that he may do the proper work of a bishop; that he may direct and inspect the flock of Christ; confirm the unstable, reclaim the reprobate, &c. *Bishop Watson.*

Diocese is also used in ancient authors for the province of a metropolitan. Diocesis meant, originally, a civil government, composed of divers provinces. The first division of the empire into dioceses is ordinarily ascribed to Constantine, who distributed the whole Roman state into four: viz. those of Italy, Illyria, the east, and Africa. And yet, long before Constantine, Strabo, who wrote under Tiberius, takes notice (lib. xiii. p. 432) that the Romans had divided Asia into dioceses; and complains of the confusion such a division occasioned in geography, Asia being no longer divided by people, but by dioceses, each of which had a tribunal or court, where justice was administered. Constantine, then, was only the institutor of those large dioceses which comprehended several metropoles and governments; the former dioceses only comprehending one jurisdiction, or the country under one judge, as appears from this passage in Strabo, as well as from Cicero himself; lib. iii. epist. ad famil. 9. and lib. xiii. ep. 67. Thus, at first, a province included diverse dioceses; and afterwards a diocese came to comprise divers provinces. In after times the Roman empire became divided into thirteen dioceses or prefectures; though, including Rome and the suburbs, there were fourteen. These fourteen dioceses comprehended 120 provinces; each province had a proconsul, who resided in the capital; and each diocese of the empire had a consul, who resided in the principal city of the district. On this civil constitution the ecclesiastical one was afterwards regulated: each diocese had an ecclesiastical vicar or primate, whose judgment determined all the concerns of the church within his territory. At present diocese is confined to a single province, under a metropolitan, or more commonly to the single jurisdiction of a bishop. Brito affirms diocese to be properly the territory and extent of a baptismal or parochial church; whence the word is used by divers authors to signify a simple parish.

DIOCLEIA, Διοκλεια, in antiquity, a solemnity kept in the spring, at Megara, in memory of the Athenian hero, who died in the defence of the youth he loved.

DIOCLESIANUS (Caius Valerius Jovius), a celebrated Roman emperor, born of an obscure family in Dalmatia, in 245. He was first a common soldier, and by merit and success he gradually rose to the office of a general; and at the death of Numerian, in 284, was invested with imperial power. In this high station he rewarded the fidelity of Maximian, who had shared with him all the subordinate offices in the army, by making him his colleague on the throne. He created two subordinate emperors, Constantius and Galerius, by the title of Cæsars, whilst he claimed for himself and his colleague the superior title of Augustus. Dioclesian has been celebrated for his military virtues; and though he was not polished by education, was, nevertheless, a patron of learning. He was bold, resolute, and active; but his cruelty to the Christians has been deservedly branded with infamy. After he had reigned twenty-two years in the greatest prosperity, he publicly abdicated the crown at Nicomedia, in 305, and retired to a private station at Salona. Maximian, his colleague, was compelled to follow his example; and when he, some time after, endeavoured to rouse the ambition of Dioclesian and persuade him to re-assume the imperial purple, he received for answer, that Dioclesian took now more delight in cultivating his little garden, than he formerly enjoyed in a palace, when his power was extended over all the earth. He lived nine years after his abdication in the greatest security and enjoyment at Salona, and died in 314, in the sixty-eighth year of his age. His persecution of the Christians forms a chronological era, called the era of Dioclesian, or of the Martyrs. It was long used in theological writings, and is still followed by the Copts and Abyssinians. It commenced August 29th, A. D. 284.

DIOCTAHEDRIA, in natural history, a genus of pellucid and crystalliform spars, composed of two octangular pyramids, joined base to base, without any intermediate column. Of these some have long pyramids, others short and sharp-pointed ones, and others short and obtuse pointed ones; the two former species being found in the Hartz, and the last in the mines of Cornwall.

DIODATI (John), a Protestant divine, and professor of theology at Geneva, who was born at Lucca in 1579, and died at Geneva in 1652. He is distinguished by his translations: 1. Of the Bible into Italian, with notes, Geneva, 1607, 4to. This work is, however, rather a paraphrase than a translation, and the notes, divine meditations more than critical reflections. 2. Of the Bible into French, Geneva, 1644; and 3. Of Father Paul's History of the Council of Trent into French.

DIODIA, in botany, a genus of the monogynia order, and tetrandria class of plants; natural order, forty-seventh, stellatæ: cor. monopetalous and funnel-shaped: caps. bilocular and dispermous. Species six, natives of the West Indies and of Mexico.

DIODON, the sun-fish, in ichthyology, a genus belonging to the order of branchiostega There are three species: viz.

1. D. trystrix, or the globe-fish, common to

Europe and South Carolina. The form of the body is usually oblong; but when alarmed it has the power of inflating the belly to a globular shape of great size. This seems designed as a means of defence against fish of prey, as they have less means of laying hold of it, and are besides terrified by the numerous spines with which that part is armed, and which the animal can erect on every part. The mouth is small; the irides white, tinged with red; the back, from head to tail, almost straight, or at least very slightly elevated, of a rich deep blue color. It has the pectoral, but wants the ventral fins: the tail is almost even, divided by an angular projection in the middle; tail and fins brown. The belly and sides are white, shagreened, or wrinkled, and beset with innumerable small sharp spines, adhering to the skin by four processes.

2. D. mola, or the short sun-fish, differs from the oblong, in being much shorter and deeper. The back and the anal fins are higher, and the aperture to the gills not semilunar, but oval. The situation of the fins is the same in both. Both kinds are taken on the western coasts of this kingdom, but in much greater numbers in the warmer parts of Europe.

3. D. oblongus, the oblong sun-fish, grows to a great bulk: one examined by Sylvianus was above 100 pounds in weight; and Dr. Borlase mentions another taken at Plymouth in 1734, that weighed 500. In form it resembles a bream, or some deep fish cut in the middle. The mouth is very small, and contains in each jaw two broad teeth, with sharp edges. The eyes are small; before each is a small semilunar aperture; the pectoral fins are very small, and placed behind them. The color of the back is dusky, and dappled; the belly silvery; between the eyes and the pectoral fins are certain streaks, pointing downwards. The skin is free from scales. When boiled, it has been observed to turn into a glutinous jelly, resembling boiled starch when cold, and served the purposes of glue on being tried on paper and leather. The meat of this fish is uncommouly rank: it feeds on shell-fish. The sun-fish of the Irish, the squalus of Gmelin, differs in all respects from this.

DIODORUS, surnamed Siculus, an ancient historian, born at Argyra, in Sicily. He wrote a history of Egypt, Persia, Syria, Media, Greece, Rome, and Carthage; and it is said that he visited all the places mentioned in his history, which was the labor of thirty years. He is, however, too credulous in some of his narratives; and often dwells too long upon fabulous reports and trifling incidents; while events of the greatest importance to history are treated with brevity, and sometimes passed over in silence. He lived in the age of Cæsar and Augustus, and spent much time at Rome to procure information, and authenticate his history. This important work, which he composed in Greek, contained forty books of which there are only fifteen remaining. The best editions are that of Amsterdam, 1745, in 2 vols. folio, and Heyne, 10 vols. 8vo. 1793.

DIŒCIA, the twenty-second class in Linnæus's sexual system, consisting of plants which, having no hermaphrodite flowers, produce male and female flowers on separate roots. These last only ripen the seeds; but require for that purpose the vicinity of a male plant; for the aspersion or sprinkling of the male dust. From the seeds of the female flowers, thus impregnated, are raised both male and female plants. The plants in the class diœcia are therefore all either male or female, on separate roots; not hermaphrodite, as in the greater number of classes; nor with male and female flowers upon one root, as in the class monœcia. See BOTANY.

DIOGENES of Apollonia, in the island of Crete, held a considerable rank among the philosophers who taught in Ionia before Socrates appeared at Athens. He was the scholar and successor of Anaximenes, and in some measure rectified his master's opinion concerning air being the cause of all things. It is said that he was the first who observed that air was capable of condensation and rarefaction. He taught with great reputation at Athens; but was at length banished for the freedom of his opinions. He died about A.A.C. 450.

DIOGENES the Cynic, an ancient philosopher, the son of a banker of Sinope. Being banished with his father for coining money, he retired to Athens, where he studied philosophy under Antisthenes. Here he added new degrees of austerity to the sect of the Cynics, and never did any philosopher carry contempt for the conveniences of life so far. He lodged in a tub; and had no other property beside his staff, wallet, and wooden bowl, which last he threw away, on seeing a boy drink out of the hollow of his hand. He used to call himself a vagabond, who had neither house nor country; was obliged to beg was ill clothed, and lived from hand to mouth. Such singularity soon gained him reputation; and Alexander the Great condescended to visit the philosopher in his tub. He asked if there was any thing in which he could oblige him: 'Get out of my sunshine' was the only answer from the philosopher. The conqueror was so struck with the independence of mind thus exhibited, that he declared, 'if he was not Alexander, he would choose to be Diogenes.' In reply to one who asked at what time he ought to dine, Diogenes said, 'If you are a rich man, when you *will*; if you are poor, when you *can*.' 'Would you be revenged upon your enemy,' said Diogenes, 'be virtuous, that he may have nothing to say against you.' As Diogenes was going over to the island of Ægina, he was taken by pirates, who carried him into Crete, and there exposed him to sale. He answered the crier, who asked him what he could do, that 'he knew how to command men:' and perceiving Xeniades, a Corinthian, going by, he said, 'Sell me to that gentleman, for he wants a master.' Xeniades, struck with the singularity of Diogenes, bought him and carried him to Corinth, appointed him tutor to his children, and soon entrusted him with the management of his house. Diogenes's friends being desirous of redeeming him, 'You are fools,' said he; 'the lions are not the slaves of those who feed them, but they are the servants of the lions.' Some say that Diogenes spent the remainder of his life in Xeniades's family; but Dio Chrysostom asserts that he passed the winter

at Athens, and the summer at Corinth. He died at Corinth when he was about ninety years old: but authors are not agreed either as to the time or manner of his death. The account of Jerom is, that as he was going to the Olympic games, a fever seized him; upon which he lay down under a tree, and refused the assistance of those who accompanied him. 'Go you to the games,' said he, 'and leave me to contend with my illness. If I conquer, I will follow you: if I am conquered, I shall go to the shades below.' He despatched himself that very night; saying, that 'he did not so properly die, as get rid of his fever.' He had for his disciples Onesicritus, Phocion, Stilpo of Megara, and several other great men. His works are all lost.

Diogenes, surnamed Laertius, from Laerta in Cilicia, his birth place, an ancient Greek author, who wrote ten books of the Lives of the Philosophers, still extant. In what age he flourished is not determined. The oldest writers who mention him are Sopater of Alexandria, who lived in the time of Constantine the Great, and Hesychius Milesius, who lived under Justinian. Diogenes often mentions Plutarch and Phavorinus; and Menage has fixed the period of his appearance at the time of Severus, or about A.A.C. 200. He divided his Lives into books, and inscribed them to a learned lady of the Platonic school, as he himself intimates in his Life of Plato. There have been several editions of his Lives of the Philosophers; but the best is that printed in 2 vols. 4to., at Amsterdam, 1693.

DIOMEDES, in fabulous history, a tyrant of Thrace, who is said to have fed his horses with the flesh of men. Hercules killed him, and threw him to be eaten by his own carnivorous horses; Hyginus says there were four of them, and that the hero afterwards killed them, along with Abderus, their groom.

Diomedes, king of Ætolia, the son of Tydeus and Deiphyle, one of the bravest of the Grecian chiefs in the Trojan war. He went with Ulysses to steal the Palladium from the temple of Minerva in Troy; and assisted in murdering Rhesus king of Thrace, and carrying off his horses. At his return from the siege of Troy, he lost his way in the darkness of the night, and landed in Attica, where his companions plundered the country, and lost the Trojan Palladium. During his long absence, his wife Ægiale had prostituted herself to Cometes, one of her servants. This was attributed to the resentment of Venus, whom Diomedes had wounded in a battle before Troy. He resolved to abandon his native country, which was the seat of his disgrace; and the attempts of his wife to take away his life, hastened his departure. He came to that part of Italy which has been called Magna Græcia, where he built a city, which he called Argyrippa, and married the daughter of Daunus, the king of the country. He died there in extreme old age; or, according to a certain tradition, he perished by the hand of his father-in-law. His death was greatly lamented by his companions, who, in the excess of their grief, were changed into birds resembling swans. These birds took flight into a neighbouring island in the Adriatic, and became remarkable for the tameness with which they approached the Greeks, and for the horror with which they shunned all other nations. They are called the birds of Diomedes. Altars were raised to Diomedes, as to a god, one of which Strabo mentions at Timavus.

DIOMEDIA, in ornithology, a genus belonging to the order of anseres. The bill is strait; the superior mandible is crooked at the point, and the lower one is truncated; the nostrils are oval, open, a little prominent, and placed on the sides. There are four species: the principal are:—

1. D. demersa, has no quill-feathers on the wings; and the feet have four toes, connected together by a membrane. It is the black penguin of Edwards, about the size of a goose, and is found at the Cape of Good Hope. It is an excellent swimmer and diver; but hops and flutters in a strange aukward manner on the land; and, if hurried, stumbles perpetually, and frequently runs for some distance like a quadruped, making use of the wings till it can recover its upright posture, crying out at the same time like a goose, but in a much hoarser voice. It is said to clamber some way up the rocks in order to make the nest; in doing which, it has been observed to assist with the bill. The eggs are two in number, white, as large as those of a duck, and reckoned delicious eating, at least are thought so at the Cape, where they are brought in great numbers for that purpose. At this place the birds are often seen kept tame; but in general they do not survive the confinement many months.

2. D. exulans, has pennated wings, and three toes on each foot. It is the albatross of Edwards; and is about the size of a pelican. These birds are found in the ocean betwixt the tropics, and at the Cape of Good Hope. They are also often seen in vast flocks in Kamtschatka, and the adjacent islands, about the end of June, where they are called great gulls; but it is chiefly in the bay of Penschinensi, the whole inner sea of Kamtschatka, the Kurile Isles, and that of Bhering; for on the eastern coasts of the first they are scarce, a single straggler only appearing now and then. Their chief motive for frequenting these places seems to be plenty of food; and their arrival is a sure presage of shoals of fish following. At their first coming they are very lean, but soon grow immensely fat. They are very voracious, and will often swallow a salmon of four or five pounds weight; but as they cannot take the whole of it into their stomach at once, part of the tail end will often remain out of the mouth; and the natives, finding the bird in this situation, easily knock it on the head on the spot. Before the middle of August they migrate elsewhere. They are often taken by a hook baited with a fish, not for the sake of their flesh (it being hard and unsavory) but on account of the intestines, a particular part of which is blown up as a bladder, and serves as a float to buoy up nets in fishing. Of the bones, tobacco-pipes, needle-cases, &c., are made. When caught they defend themselves stoutly with the bill. Their cry is harsh and disagreeable, not unlike the braying of an ass. The breeding places of the albatross, if at all in the northern hemisphere, have not yet been pointed out; but we are certain of their multiplying in the southern, viz. Patagonia and Falk-

land Islands; to this last place they come about the end of September or beginning of October, among other birds, in great abundance. The nests are made on the ground with earth, are round in shape, a foot in height, indented at top. The egg is larger than that of a goose, four inches and a half l ng, white, marked with dull spots at the bigger end, and is thought to be good food, the white never growing hard with boiling. While the female is sitting, the male is constantly on the wing, and supplies her with food: during this time they are so tame as to suffer themselves to be shoved off the nest while their eggs are taken from them; but their chief destruction arises from the hawk, which, the moment the female gets off the nest, darts thereon, and flies away with the egg. The albatross itself likewise has its enemy, being greatly persecuted while on the wing by the dark gray gull, called skua. This bird attacks it on all sides, but particularly endeavours to get beneath, which is only prevented by the first settling on the water; and indeed they do not frequently fly at a great distance from the surface, except obliged so to do by high winds or other causes. As soon as the young are able to remove from the nest, the penguins take possession, and hatch their young in turn. It is probable that they pass from one part of the globe to another according to the season; being now and then met with by different voyagers at various times in intermediate places. The food is supposed to be chiefly small marine animals, especially of the molluscæ or blubber class, as well as flying fish.

DION, the son of Hipparinus, a Syracusan, famous for his power and abilities. He was related to Dionysius, and often joined with the philosopher Plato (who at his request had come to reside at the tyrant's court), in advising him to lay aside the supreme power. His great popularity rendered him odious in the eyes of the tyrant, who banished him to Greece. There he collected a numerous force, and resolved to free his country from tyranny. This he easily effected on account of his popularity. He entered the port of Syracuse with only two ships; and in three days reduced under his power an empire which had already subsisted for fifty years, and which was guarded by 500 ships of war, and above 100,000 troops. The tyrant fled to Corinth, and Dion kept the power in his own hands, fearful of the aspiring ambition of some of the friends of Dionysius: but he was shamefully betrayed and murdered by one of his familiar friends called Callicrates, or Callippus, 354 years before the Christian era.

DION CASSIUS, a native of Nicæa in Bithynia. His father's name was Apronianus. He was raised to the greatest offices of state in the Roman empire by Pertinax, and his three successors. He was naturally fond of study, and he improved himself by unwearied application. He was ten years in collecting materials for a history of Rome, which he published in eighty books, after a laborious employment of twelve years in composing it. This valuable history began with the arrival of Æneas in Italy, and was carried down to the reign of Alexander Severus. The first thirty-four books are totally lost; the twenty following, that is from the thirty-fifth to the fifty-fourth, remain entire; the six following are mutilated; and fragments are all that we possess of the last twenty. In the compilation of this extensive history, Dion proposed Thucydides for a model, but he is not perfectly happy in his imitation. His style is pure and elegant, and his narrations are judiciously managed, and his reflections learned; but, upon the whole, he is credulous, and the bigoted slave of partiality, satire, and flattery. He inveighs against the republican principles of Brutus and Cicero, and extols the cause of Cæsar. Seneca is the object of his satire, and he represents him as debauched and licentious in his morals.

DIONÆA, in botany, a genus of sensitive plants lately discovered. It belongs to the order monogynia, in the decandria class. There is but one genus as yet known: viz. D. muscipula, or Venus's fly-trap. Every one skilled in natural history knows, that the sensitive plants close their leaves, and bend their joints, upon the least touch (see MIMOSA); but no design of nature has yet appeared to us from these surprising motions: they soon recover themselves again, and their leaves are expanded as before. But the dionæa shows that nature may have some view towards its nourishment, in forming the upper joint of its leaf like a machine to catch food; upon the middle of this lies the bait for the unhappy insect that becomes its prey. Many minute red glands that cover its inner surface, and which discharge a smell of carrion, tempt the poor animal to taste them; and the instant these tender parts are irritated by its feet, the two lobes rise up, grasp it fast, lock the two rows of spines together, and squeeze it to death. And lest the strong efforts for life, in the creature thus taken, should serve to disengage it, three small erect spines are fixed near the middle of each lobe among the glands, that effectually put an end to all its struggles. Nor do the lobes ever open again, while the dead animal continues there. The plant, however, cannot distinguish an animal from a general substance; for, if we introduce a straw or a pin between the lobes, it will grasp it full as fast as if it was an insect. It grows in North America, in about 35° lat. N., in wet shady places, and flowers in July and August. The largest leaves are about three inches long, and an inch and a half across the lobes, the glands of those exposed to the sun are of a beautiful red color; but those in the shade are pale, and inclining to green. The roots are squamous, sending forth but few fibres, and are perennial. The leaves are numerous, inclining to bend downwards, and are placed in a circular order; they are jointed and succulent; the lower joint, which is a kind of stalk, is flat, longish, two edged, and inclining to heart-shaped. In some varieties they are serrated on the edges near the top. The upper joint consists of two lobes; each lobe is of a semi-oval form, with its margins furnished with stiff hairs like eye-brows, which embrace or lock in each other when they close. The upper surfaces of the lobes are covered with small red glands; each of which appears, when highly magnified, like a compressed arbutus-berry. If the fly, enclosed in

these lobes, can be forced out so as not to strain the lobes, they expand again; but if force is used to open them, so strong has nature formed the spring of their fibres, that one of the lobes will generally snap off rather than yield. The stalk is about six inches high, round, smooth, and without leaves; ending in a spike of flowers. The flowers are milk-white, and stand on foot-stalks, at the bottom of which is a little painted bractea or flower leaf. The soil in which it grows, as appears from what comes about the roots of the plants when they are brought over, is a black, light mould, intermixed with white sand, such as is usually found in our moorish heaths. Being a swamp plant, a northern aspect will be properest for it at first, to keep it from the direct rays of the sun; and in winter, till we are acquainted with what cold weather it can endure, it will be necessary to shelter it with a bell glass, such as is used for melons. This should be covered with straw or a mat in hard frosts. By this means several of these plants have been preserved through the winter in a very vigorous state. Its sensitive quality will be found in proportion to the heat of the weather, as well as the vigor of the plant. Our summers are not warm enough to ripen the seed; or possibly we are not yet sufficiently acquainted with the culture of it. To try further experiments on its sensitive powers, some of the plants might be placed in pots of light moorish earth, set in pans of water, in an airy stove in summer; where the heat of such a situation, being like that of its native country, will make it surprisingly active.

DIONYSIA, in Grecian antiquity, solemnities in honor of Bacchus, sometimes called by the general name of Orgia; and by the Romans Bacchanalia and Liberalia.

DIONYSIACA, in antiquity, a designation given to plays and all manner of sports acted on the stage: because play-houses were dedicated to Dionysius, or Bacchus, one of the deities of sports.

DIONYSIUS I. from a private secretary became general and tyrant of Syracuse and all Sicily. He patronised learning and men of letters, and made his court the resort of many of the greatest philosophers of Greece. He was also himself a poet; and having, by bribes, gained the prize for tragedy at Athens, he indulged himself so immoderately at table from excess of joy that he died of the debauch, A.A.C. 386. Some authors, however, say he was poisoned by his physicians.

Dionysius II., his son and successor, was a greater tyrant than his father: his subjects were obliged to fly to the Corinthians for succour; and Timoleon their general having conquered the tyrant, he fled to Athens, where he was obliged to keep a school for subsistence. He died A.A.C. 343.

Dionysius, surnamed Halicarnasseus, or the Halicarnassian, a celebrated historian, and one of the most judicious critics of antiquity. He was born at Halicarnassus; and went to Rome after the battle of Actium, where he staid twenty-two years in the reign of Augustus. He there composed in Greek his History of the Roman Antiquities, in twenty books of which the first eleven only are now remaining. There are also still extant several of his critical works. The best edition of the works of this author is that of Oxford, in 1704, in Greek and Latin, by Dr. Hudson.

Dionysius, surnamed Periegetes, a learned geographer, to whom is attributed a Periegesis, or Survey of the Earth, in Greek verse. Some suppose that he lived in the time of Augustus; but Scaliger and Saumasius place him under the reign of Severus, or Marcus Aurelius. He wrote many other works, but his Periegesis is the only one we have remaining; the best and most useful edition of which is that improved with notes and illustrations by Hill.

Dionysius, the Areopagite, was born and educated at Athens. He went afterwards to Heliopolis in Egypt; where, if we may believe some writers of his life, he saw that extraordinary eclipse which happened at our Saviour's passion, and was urged by some uncommon impulse to cry out, Aut Deus Naturæ patitur, aut cum patiente dolet: 'Either the God of Nature suffers, or condoles with him who does.' At his return to Athens he was elected into the court of Areopagus, whence his title. About A. D. 50, he embraced Christianity (Acts xvii. 34); and, some say, was appointed first bishop of Athens by St. Paul. He is supposed to have suffered martyrdom; but whether under Domitian, Trajan, or Adrian, is uncertain. We have nothing remaining under his name, but what there is great reason to believe spurious.

DJOJOCARTA, a considerable town and European settlement of the island of Java, situated on a navigable stream. It is the capital of the sultan of Mataram, who has a palace here three miles in circuit, surrounded by a broad wet ditch with draw-bridges, and defended by 100 pieces of cannon. Within its precincts is a lake, on which stands an ancient mansion, which is entered by a long and spacious passage under the water. A guard of 300 Amazons, daughters of petty chieftains, are said to be trained here both to a military and domestic life. They are armed with spears, and are excellent equestrians. This place was taken by a coup de main, by the British, in 1812.

DIOPHANTINE Problems, in mathematics, certain questions relating to square and cube numbers, and right-angled triangles, &c., the nature of which was determinined by Diophanus.

DIOP'TRIC, *adj.* } Gr. διοπτομαι. Af-
DIOP'TRICAL, *adj.* } fording a medium for the
DIOP'TRICS, *n. s.* } sight; assisting the sight in the view of distant objects; a branch of the science of optics.

Being excellently well furnished with *dioptrical* glasses, he had not been able to see the sun spotted. *Boyle.*

View the asperities of the moon through a *dioptrick* glass, and venture at the proportion of her hills by their shadows. *More's Antid. against Atheism.*

Dioptrics; of δια, through, and οπτομαι, I see; sometimes called also Anaclastics, the doctrine of refracted vision. A branch of the science of optics. The ancients treated distinctly of direct and reflected vision; but of refracted vision

their knowledge was very imperfect. An early treatise on refraction, in nine books, was written by J. Baptista Porta; but Kepler was the first who elucidated this subject in any great degree, having demonstrated the properties of spherical lenses very accurately, in a treatise published anno 1611. After Kepler, Galileo introduced the doctrine into his Letters; as also an Examination of the Preface of Johannes Pena upon Euclid's Optics, concerning the use of Optics in astronomy. Des Cartes also wrote a treatise on Dioptrics, commonly annexed to his Principles of Philosophy, one of his best works: in which the true doctrine of vision is more distinctly explained than by any former writer, and in which is contained the law of refraction, discovered by Snell, though the name of the inventor is suppressed. Here are also laid down the properties of elliptical and hyperbolical lenses, with the practice of grinding glasses. Dr. Barrow has treated on Dioptrics in a brief but very elegant manner, in his Optical Lectures, read at Cambridge. There are also Huygens's Dioptrics, an excellent work of its kind. Molyneux's Dioptrics, a heavy and dull work. Hartsoeker's Essai de Dioptrique, Cherubin's Dioptrique Oculaire, et De Vision Parfaite, David Gregory's Elements of Dioptrics, Traber's Nervus Opticus, and Zahn's Oculus Artificialis Teledioptricus. Dr. Smith's Optics is a complete work of its kind. Wolfius's Dioptrics are contained in his Elementa Matheseos Universalis. Harris's Optics, Bouguer's Optics, and the second volume of Haüy's Natural Philosophy, may also be advantageously consulted. The Treatise on Optics, and the Optical Lectures of Newton, contain an account of inestimable experiments and reasonings in this science: and Mr. Dollond's discovery of achromatic glasses, by which colors are obviated in refracting telescopes, has been of great importance to this branch of optics. See Optics.

DIORTHO'SIS, *n.s.* Gr. *διορθωσις*, of *διορθοω* to make straight. A chirurgical operation, by which crooked or distorted members are restored to their primitive and regular shape.

DIOSCOREA, in botany, a genus of the hexandria order and diœcia class of plants; natural order eleventh, sarmentaceæ. Male CAL. sexpartite: COR. none. Female CAL. sexpartite: STYL. three: CAPS. trilocular and compressed; and there are two membranaceous seeds. There are fifteen species, of which the only remarkable one is the D. bulbifera, or the yam. It has triangular winged stalks, which trail upon the ground, extend far, and frequently put out roots from their joints as they lie upon the ground, by which the plants are multiplied. The roots are eaten by the inhabitants of both the Indies; and, in the West India islands, make the greatest part of the negroes' food. The plant is supposed to have been brought from the East to the West Indies; for it has never been observed to grow wild in any part of America; but, in the island of Ceylon, and on the coast of Malabar, it grows in the woods, and there are in those places many different species. It is propagated by cutting the root in pieces, observing to preserve an eye in each, as in planting potatoes. One plant will produce three or four large roots. The skin of these roots is pretty thick, rough, unequal, covered with many stringy fibres or filaments, and of a violet color, approaching to black. The inside is white and of the consistence of red beet. It resembles the potatoe in its mealiness, but is of a closer texture. When raw, the yams are viscous and clammy; when roasted, or boiled, they afford very nourishing food; and are often preferred to bread by the inhabitants of the West Indies, on account of their lightness and facility of digestion. When first dug out of the ground, the roots are placed in the sun to dry; after which, they are either put in sand, dry garrets, or casks; where, if kept from moisture, they may be preserved whole years without being spoiled or diminished in their goodness. The root commonly weighs two or three pounds; though some yams have been found upwards of twenty pounds weight.

DIOSCORIDES, a physician of Anazarba, in Cilicia, who lived in the reign of Nero. He was originally a soldier; but afterwards he applied himself to study, and wrote a book upon Medicinal Herbs. See Botany.

DIOSCURI, in antiquity, a name given to Castor and Pollux, as *κουροι*, the children, *Διος*, of Jupiter. They are often borne on the medals of the Roman consuls, and generally appear, as in the annexed diagram, on horse-back, armed with spears, and with helmets surmounted with stars.

DIOSCURIA, *διοσκουρια*, in antiquity, a festival in honor of Castor and Pollux. It was observed by the Cyreneans, but more especially by the people of Sparta, the birth-place of these heroes. The solemnity was full of mirth, being at a time wherein they shared plentifully of the gifts of Bacchus, and diverted themselves with sports, of which wrestling matches made a part.

DIOSMA, African spiræa, a genus of the monogynia order and pentandria class of plants: COR. pentapetalous; nectarium crown-shaped, above the germen: CAPS. five, coalited: SEEDS hooded. There are nine species, of which the most remarkable are,

1. D. hirsuta, with narrow hairy leaves; a very handsome shrub, growing to the height of five or six feet. The stalks are of a fine coral color, the leaves come out alternately on every side of the branches; the flowers are produced in small clusters at the end of the shoots, and are of a white color. They are succeeded by starry seed-vessels, having five corners; in each of which corners is a cell, containing one smooth, shining, oblong, black seed; these seed-vessels abound with a resin which emits a grateful scent, as does also the whole plant.

2. D. oppositifolia, with leaves in the form of a cross. It rises to the height of three or four feet; the branches are slender, and produced from the stem very irregularly; the flowers are produced at the ends of the branches, between the leaves; the plants continue long in flower, and make a fine appearance, intermixed with other exotics in the open air.

DIOS NOMBRE DE, a town of Mexico, on the road from the mines of Sombrerete to Durango. It contains 6800 inhabitants.

DIOSZEGH, a large market town of Hungary, in the county of Bihar, thirty miles S.S.W of Zathmar.

DIOSPOLITES NOMOS, a division of Thebais, or the Higher Egypt, to distinguish it from another of the Lower Egypt, or the Delta; south of the Nomos Thinites, on the west side of the Nile.

DIOSPYROS, the Indian date-plum, a genus of the dicœcia order and polygamia class of plants; natural order eighteenth, bicornes. CAL. hermaphrodite and quadrifid: COR. urceolated and quadrifid; STAM. eight: STYL. quadrifid: BERRY octospermous. There are two species, viz.

1. D. lotus, which is supposed to be a native of Africa, from whence it was transplanted into several parts of Italy, and also into the south of France. The fruit of this tree is supposed to be the lotus with which Ulysses and his companions were said to have been enchanted, and which made those who eat of it forget their country and relations. In the warm parts of Europe this tree grows to the height of thirty feet.

2. D. Virginiana, pinshamin, persimon, or pichumon plum, is a native of America, but particularly of Virginia and Carolina. The seeds of this sort have been frequently imported into Britain, and the trees are common in many nurseries about London. It rises to twelve or fourteen feet; but generally divides into many irregular trunks near the ground, so that it is very rare to see a handsome tree of this sort. Though plenty of fruit is produced on these trees, it never comes to perfection in this country. In America the inhabitants preserve the fruit till it is rotten, as is practised with medlars in England, when they are esteemed very pleasant. Both species are propagated by seeds, and the plants require to be treated tenderly while young; but when theyare grown up, they resist the greatest cold of this country.

DIP, *v.a.*, *v.n.* & *n.s.* } Goth. *doppen*; Sax.
DIP'CHICK, *n.s.* } dopen; Dutch *doopene*; Teut. *tauffen*; Hindoo *duba*, from Gr. δυπτω. To immerse; put into a liquid; wet; and, figuratively, to be deeply involved in any affair, and to engage as a pledge. As a neuter verb to sink; enter; immerge: as a substantive it is applied by miners to the direction of coal-shafts and minerals (see p. 268), and by scientific men to the depression of a part of the horizon, the needle of the compass, &c. Dip-chick the example explains.

Who, *dipping* all his faults in their affection,
Work like the spring that turneth wood to stone,
Convert his gyves to graces. *Shakspeare.*

Dipchick is so named of his diving and littleness. *Carew.*

And though not mortal, yet a cold shuddering dew
Dips me all o'er, as when the wrath of Jove
Speaks thunder. *Milton.*

To be baptized, is to be *dipped* in water; metaphorically, to be plunged in afflictions. *Poole's Continuators.*

In Richard's time, I doubt, he was a little *dipt* in the rebellion of the commons. *Dryden. Fables.*

Be careful still of the main chance, my son;
Put out the principal in trusty hands,
Live on the use, and never *dip* thy lands
Id. Persius.

When men are once *dipt*, what with the encouragements of sense, custom, facility, and shame of departing from what they have given themselves up to, they go on till they are stifled. *L'Estrange.*

So fishes, rising from the main,
Can soar with moistened wings on high;
The moisture dried, they sink again,
And *dip* their wings again to fly. *Swift.*

The kindred arts shall in their praise conspire,
One *dip* the pencil, and one string the lyre. *Pope.*

The vulture *dipping* in Prometheus' side,
His bloody beak with his torn liver dyed.
Granville.

The persons to be baptised may be *dipped* in water; and such an immersion or *dipping* ought to be made thrice, according to the canon. *Ayliffe's Parergon.*

Crowd round her baths, and, bending o'er the side,
Unclasped their sandals, and their zones untied,
Dip with gay fear the shuddering foot undressed,
And quick retract it to the fringed vest. *Darwin.*

In nautical observations it is necessary to know the depression or *dip* of the sea, to correct the apparent altitude of an observed object. *Dr. A. Rees.*

DIPET'ALOUS. *adj.* Δις and πεταλον. Having two flower leaves.

DIPHTHONG, *n. s.* Fr. *diphthongue*; Ital. and Span. *diftongo*; Lat. *diphthongus*; Gr. διφθογγος, from δις, double, and φθογγη, a sound.

We see how many disputes the simple and ambiguous nature of vowels created among grammarians, and now it has begot the mistake concerning *diphthongs*; all that are properly so are syllables, and not *diphthongs*, as is intended to be signified by that word. *Holder's Elements of Speech.*

Make a *diphthong* of the second eta and iota, instead of their being two syllables, and the objection is gone. *Pope.*

DIPHTHONGS are distinguished by some authors into those that regard the eye, and those that regard the ear; but a more accurate distinction was long ago made by that eminent grammarian, Mr. Ruddiman, into proper and improper. A third class, however, seems to exist in the English language, which may be styled neutral. 1. Improper diphthongs, are those wherein only one of the vowels is sounded, the other being sunk; as æ and œ in the Latin, and ea, ei, eo, ie, ou, oe, ue, and ui, in the English language. The Latins pronounced the two vowels in their diphthongs ae or æ, oe or œ, much as we do; only that the one was heard much weaker than the other, though the division was made with all the delicacy imaginable. 2. Neutral diphthongs are those combinations of vowels, wherein either a new sound, different from that of both, takes place, or neither of them is sounded; for instance, the sound of eo in people, is quite different from that of eo in jeopardy, or of either of the vowels separate; and the apparent diphthong, or diphthong of the eye, as others style it, ue, in rogue, vogue, &c

is sunk altogether. Among the former of these classes may be ranked ee and oo, wherein the original sound of the vowels, instead of being lengthened, like that of aa, is changed to that of i and u. The diphthong oe, in shoe, also belongs to this class, with many others. 3. Proper diphthongs, are such as include the sound of both the component vowels, though still in one syllable; such as au, eu, and ei, in Latin; and ai, au, ay, eu, ey, oi, and ou, in English.

DIP'LOE, *n. s.* The inner plate or lamina of the skull.

Diploe, in anatomy, the soft meditullium, or medullary substance, which lies between the two laminæ of the bones of the cranium.

DIPLO'MA, *n. s.* Fr. *diplome*; from Gr. διπλωμα. See the article following.

In 1728 he received from Edinburgh and Aberdeen an unsolicited *diploma*. Academical honours would have more value, if they were always bestowed with equal judgment. *Johnson's Life of Watts.*

Diploma is peculiarly used for an instrument or licence, given by colleges, societies, &c., to clergymen or physicians, to exercise their respective professions, after passing examination, and being admitted to a degree.

DIPLOMATICS, the science of diplomas, or of ancient literary monuments, public documents, &c. It does not, however, nor can it, absolutely extend its researches to antiquity; but is chiefly confined to the middle age, and the first centuries of modern times. For though the ancients were accustomed to reduce their contracts and treaties into writing, yet they graved them on tables, or covered them over with wax, or brass, copper, stone, or wood, &c. And all that in the first ages were not traced on brass or marble, have perished by the length of time, and the destructive events, that have taken place. The word diploma signifies, properly, a letter, or epistle, folded in the middle, and not open. But, in more modern times, the title has been given to all ancient epistles, letters, literary monuments, and public documents, and to all those pieces of writing which the ancients called syngrapha, chirographa, codicilli, &c. In the middle age, and in the diplomas themselves, these writings are called literæ, præcepta, placita, chartæ indiculæ, sigilla, and bullæ; as also panchartæ, pantochartæ, tractoriæ, descriptiones, &c. The originals of these pieces are named exemplaria, or autographa, chartæ authenticæ, originalia, &c.; and the copies, apographa, copiæ, particulæ, &c. The collections that have been made of them, are called chartariæ and chartularia. The place where these papers and documents were kept, the ancients named scrinia, tabularium, or ærarium, words that were derived from the tables of brass, and, according to the Greek idiom, archeium, or archivum. To understand the nature of these ancient papers, diplomas, and MSS., and to distinguish the authentic from the counterfeit, it is necessary to observe, that the paper of the ancients came from Egypt, and was formed of thin leaves, or membranes, taken from the branches of a tree named Papyrus, or Biblum Ægyptiacum, and which were pasted one over the other with the slime of the Nile, and were pressed and polished with a pumice stone. This paper was very scarce; and it was of various qualities, forms, and prices, which they distinguished by the names of charta hieratica, luria, augusta, amphitheatrica, saitica, tanirica, emporetica, &c. They cut it into square leaves, which they pasted one to the other, in order to make rolls of them; from whence an entire book was called volumen, from volvendo; and the leaves of which it consisted, paginæ. Sometimes, also, they pasted the leaves all together by one of their extremities, as is now practised in binding; by this method they formed the back of a book, and these the learned called codices. They rolled the volume round a stick, which they named umbilicus; and the two ends which came out beyond the paper, cornua. The title, written on parchment, in purple characters, was joined to the last sheet, and served it as a cover. They made use of all sorts of strings or ribands, and even sometimes of locks, to close the book; sometimes, also, it was put into a case. It is easy for those, who apply themselves to this study, to distinguish the parchment of the ancients from that of the moderns, as well as their ink and various exterior characters; but that which best distinguishes the original from the counterfeit, is the writing or character itself; which is, in most cases, very distinctly different from one century to another. There are two works which furnish the best lights on this matter, and which may serve as sure guides in judging of what are called ancient diplomas. The one is the celebrated Treatise on the Diplomatic, by F. Mabillon; and the other, the first volume of the Chronicon Gotvicense. We shall here only add, that all the diplomas are written in Latin, and consequently the letters and characters have a resemblance to each other; but there are certain strokes of the pen which distinguish not only the ages, but also the different nations; as the writings of the Lombards, French, Saxons, &c. The letters in the diplomas are usually longer, and not so strong as those of MSS. There has been also introduced a kind of court hand, of a very disproportionate length, and the letters of which are called, Exiles litteræ, crispæ ac protractiores. The first line of the diploma, the signature of the sovereign, that of the chancellor, notary, &c., are usually written in this character. The signature of the diploma consists either of the sign of the cross, or of a monogram, or cipher, composed of the letters of the names of those who subscribed it. The initial letters of the name, and sometimes also the titles, were placed about this cross. By degrees, the custom changed, and they invented other marks. They sometimes added also the date and epoch of the signature, the feasts of the church, the days of the kalendar, &c. The successive corruption of the Latin language, the style, and orthography of each age, as well as their different titles and forms; the abbreviations, accentuations, and punctuation, and the various methods of writing the diphthongs; all these matters united, form so many characters and marks, by which the authenticity of a diploma

is to be known. The seal annexed to a diploma was anciently of white wax, and artfully imprinted on the parchment itself. It was afterwards pendent from the paper, and enclosed in a box or case, which they called bulla. There are some also that are stamped on metal, and even on pure gold.

DIPONDIUS, a coin, of very little value, mentioned by St Luke, xii. 6. Our translation of the passage is, Are not five sparrows sold for two farthings? In St. Matthew, x. 29, it runs, Are not two sparrows sold for a farthing? The Greek has assarion instead of *as*, which some say was worth half an *as*, i. e. four French deniers and one-eighth; and, according to others, two deniers and five-sixteenths. Dipondius seems rather to signify half an *as*.—Calmet. Dr. Arbuthnot, however, says, that this coin was at first libralis, or of a pound weight; and, even when diminished, it retained the name of libella; so that dipondius denotes two *asses*.

DIPPEL (John Conrad), a German physician, born at Darmstadt in 1672. He studied theology at Giessen, and afterwards read medical lectures at Strasburgh, but took his doctor's degree at Leyden in 1711. He was much addicted to the study of alchemy, and, among other secrets, pretended to have discovered the philosopher's stone. After rambling from place to place, he at last settled at Hamburgh; but having used some indiscreet freedoms with the administration of Denmark, he was given up to the government of that country, by whom he was sentenced to perpetual imprisonment in the island of Bornholm. He, however, obtained his liberty at the end of seven years; and about the same time was invited to Sweden, to attend the king, who was dangerously ill, but through the influence of the clergy, whom he had ridiculed, he was obliged to leave the kingdom in 1727. He afterwards went to Germany, and in 1733 gave out publicly that he should not die till 1808, but next year he was found dead in his bed. He denied the inspiration of the Scriptures, and wrote a number of wild enthusiastic books, under the name of Christianus Democritus. His works were published in 5 vols. 4to. 1747. We are indebted to him for the discovery of the Prussian blue, and he invented a useful oil, which is called after him.

DIPPING, among miners, signifies the interruption, or breaking off the veins of ore; an accident that gives them a great deal of trouble before they can discover the ore again. A great part of the skill of the miners consists in the understanding of this dipping of the veins. In Cornwall they have this general rule to guide them in this respect: most of their tin-loads, which run from east to west, constantly dip towards the north. Sometimes they underlie; that is, they slope down towards the north three feet in height perpendicular. This must carefully be observed by the miners, that they may exactly know where to make their air-shafts when occasion requires; yet, in the higher mountains of Dartmaer, there are some considerable loads which run north and south; these always underlie towards the east. Four or five loads may run nearly parallel to each ther in the same hill; and yet, which is rare, they may meet all together in one hatch, as it were a knot, and so separate again, and keep their former distances.

The DIPPING NEEDLE, or INCLINATORY NEEDLE, is defined, by Dr. Hutton, 'a magnetical needle, so hung, as that, instead of playing horizontally, and pointing out N. and S., one end dips or inclines to the horizon, and the other points to a certain degree of elevation above it. It is used for observing the quantity of inclination towards the earth assumed by the magnetic needle. The inventor of the dipping needle was Robert Norman, a compass-maker, at Ratcliffe, about 1580. This is not only testified by his own account, in his New Attractive, but also by Mr. Whiston, Dr. Gilbert, Mr. William Burrowes, Mr. Henry Bond, and other writers of that period. The occasion of the discovery he himself relates, viz. that it being his custom to finish, and hang the needles of his compasses, before he touched them, he always found that, immediately after the touch, the N. point would dip or decline downwards, pointing in a direction under the horizon; so that, to balance the needle again, he was always forced to put a piece of wax on the S. end, as a counterpoise. The constancy of this effect led him at length to observe the precise quantity of the dip, or to measure the greatest angle which the needle would make with the horizon. This, in 1576, he found at London to be 71° 50.

It is not quite certain, however, whether the dip varies, as well as the horizontal direction, in the same place. Mr. Graham made many experiments with the dipping needle in 1723, and found the dip between 74° and 75°. Mr. Nairne, in 1772, found it somewhat above 72°. And, by many observations made since that time at the Royal Society, the medium quantity is 72½°. The trifling difference between the first observations of Norman, and the last of Mr. Nairne and the Royal Society, has led some philosophers to the opinion that the dip is unalterable; and yet it may be difficult to account for the great difference between these and Mr. Graham's numbers, considering the well-known accuracy of that ingenious gentleman. Philosophical Transactions, vol. xlv. p. 279; vol. lxii. p. 476; vol. lxix. lxx. lxxi. From a comparison of Mr. Gilpin's observations of the dip in August, 1805, when he found it 70° 20′, with those of Mr. Cavendish, in 1775, its annual decrease, on a mean, appears to have been 4·3′; and its progressive annual decrease, on a mean, in the above-mentioned period of thirty years, to have been 1·4′. It is certain, from many experiments and observations, that the dip is different in different latitudes, and that it increases in going northward. It appears from a table of observations, made with a marine dipping needle of Mr. Nairne's, in a voyage towards the north pole in 1773, that

in lat. 60° 18′ the dip was 75° 0′,
in lat. 70° 45′ the dip was 77° 52′,
in lat. 80° 12′ the dip was 81° 52′, and
in lat. 80° 27′ the dip was 82° 2½′.

See Phipps's Voyage, p. 122. See also the Observations of Mr. Hutchins, made in Hudson's Bay and Straits, Philosophical Transactions, vol. lxv. p. 129. Messrs Burrowes, Gilbert, Ridley,

Bond, &c. endeavoured to apply this discovery of the dip to the finding of the latitude; and Bond first proposed finding the longitude by it; but for want of observations and experiments, he could not conduct his reasoning to any length. Mr. Whiston, being furnished with the farther observations of colonel Windham, Dr. Halley, Mr. Pound, Mr. Cunningham, M. Noel, M. Feuille, and his own, made great improvements in the doctrine and use of the dipping needle, brought it to more certain rules, and endeavoured to find the longitude by it. For this purpose, he observes: 1. That the true tendency of the N. or S. end of every magnetic needle is not to that point of the horizon to which the horizontal needle points, but towards another directly under it, in the same vertical, and in different degrees under it, in different ages, and at different places. 2. That the power by which the horizontal needle is governed, and all our navigation usually directed, it is proved, is only one quarter of the power by which the dipping needle is moved; which should render the latter by far the more effectual and accurate instrument. 3. That a dipping needle of a foot long will plainly show an alteration of the angle of inclination, in these parts of the world, in one-eighth of a degree, or seven and a half geographical miles; and a needle of four feet, in two or three miles; i. e. supposing these distances taken along, or near a meridian. 4. A dipping needle four feet long, in these parts of the world, will show an equal alteration along a parallel, as another of a foot long will show along a meridian, i. e. that will, with equal exactness, show the longitude, as this the latitude. This depends on the position of the lines of equal dip, in these parts of the world, which, it is found, do lie about 14° or 15° from the parallels. Hence he argues, that as we can have needles of five, six, seven, eight, or more feet long, which will move with strength sufficient for exact observation; and since microscopes may be applied for viewing the smallest divisions of degrees on the limb of the instrument, it is evident that the longitude at land may thus be found to be less than four miles. And as there have been many observations made at sea with the same instrument by Noel, Feuille, &c., which have determined the dip usually within a degree, sometimes within a half, or one-third of a degree, and this with small needles of five or six, or, at the most, nine inches long; it is inferred that the longitude may be found even at sea, within less than one-eighth of a degree.

The phenomena of the dipping needle are:—That about the equatorial parts of the earth it remains in an horizontal position, but depresses one end as we recede from these; the north end, if we go towards the north, and the south end, if we proceed towards the south pole. The farther north or south that we go, the inclination becomes the greater; but there is no place of the globe hitherto discovered where it points directly downwards, though it is supposed that it would do so in some part of it very near the pole. Its inclination is likewise found to vary very considerably at different times in different places of the earth, and by some changes of situation, in such a manner as must appear at first sight very unaccountable. Of all those who have attempted the investigation of this obscure subject, none have been more successful than M. Cavallo, who, in his Treatise on Magnetism, has given particular attention to all the phenomena, and accounts for them upon plain and rational principles, in the following manner:—The dip of the magnetical needle, in general, may be understood from the following easy experiment: Lay an oblong magnet horizontally upon a table, and over it suspend another smaller magnet (a sewing needle to which the magnetic virtue has been communicated will answer the purpose), in such a manner as to remain in an horizontal position when not disturbed by another magnet. Now, if this last small magnet or sewing needle, suspended by the middle, be brought just over the middle of the large one, it will turn itself in such a manner that the south pole of the small magnet will point towards the north pole of the large one; and if at an equal distance from both, will remain in an horizontal position. But if we move it nearer to one of the poles than the other, it will be readily understood that the corresponding end of the needle will be attracted by the pole to which it approaches, and of consequence inclined downwards; the contrary end being proportionably elevated. It is likewise evident, that this inclination will be greater or less according to the distance at which the small magnet is placed from the pole of the large one; the attraction of the nearest pole having always the greatest effect upon it. And it is equally plain that, when brought directly over one of the poles of the large magnet, it will turn its own contrary one directly towards it, and thus lie exactly in the axis of the large one. The application of this experiment to the phenomena of the dipping needle is obvious, as nothing more is requisite for solving the whole mystery, than to suppose the earth itself to be the large magnet, and the magnetic needle, or any other magnetic body, the small magnet in the experiments: for admitting that the north pole of the earth possesses a south magnetism, and that the opposite pole is possessed of a north magnetical polarity; it appears, and the theory is confirmed by experiment, that when a magnet is suspended properly in the equatorial parts of the world, it must remain in an horizontal position; but when removed nearer to one of the poles, it must incline one of its extremities, viz. that which is possessed of the contrary magnetic polarity; and that this inclination must increase in proportion as the magnet or magnetic needle recedes from the equator of the earth; and, lastly, when brought exactly upon either of the poles of the earth, it must stand perpendicular to the ground, or in the same direction with the axis of the earth. The only difficulty in this explanation arises from the attributing a south magnetism to the north pole of the earth; but by this our author means only that its magnetism is contrary to that end of the magnetic needle which turns towards it; and in the same sense it must be understood, that the south pole of the earth has a north magnetic polarity. If the extremities of the axis of the earth, or the poles about which it performs its diurnal revolution, coincided with its magnetic poles, or even if the magnetic poles

were always at a certain distance from them, the inclination of the needle would be always the same at equal distances from the equator, and might be very useful for determining the latitudes. But it would seem, that these poles are perpetually shifting their places, since both the inclination and horizontal direction of the needle are continually varying even in the same place: so that its quantity of inclination cannot be exactly calculated. Two general remarks may be made upon this subject. 1. That the inclination of the needle does not alter regularly in going from N. to S. or from S. to N. in any meridian. 2. That its alteration in the same place, and at different times, is but small. Thus, in London, about the year 1576, the dip was 70° 50′ below the horizon, and in 1775 it stood at 72° 3′; the alteration in nearly 200 years, scarce amounting to three quarters of a degree, which may be attributed to the errors of the instruments; as these were at first exceedingly erroneous, and even yet are far from being perfect.

The general method of constructing dipping needles is, to pass an axis quite through the needle itself, and to let the extremities of the axis rest upon two supports, like the beam of a pair of scales, that the needle may move vertically round; and hence, when placed in the magnetic meridian, it will naturally assume that position which is called the magnetic line, viz. the two ends nearly north and south, and one of them inclined considerably to the horizon. The degrees of this inclination are shown upon a graduated circle; and when the instrument is made use of at land it has a stand, but at sea a ring is necessary to suspend it. When furnished with a stand, it has also a spirit-level; and the stand has three screws, by which the whole is adjusted in such a manner as to let the centre of motion in the needle, and the mark of 90° on the lower part of the divided circle, be exactly in the same line perpendicular to the horizon. The greatest imperfections attending this instrument are the balancing of the needle itself, and the difficulty of knowing whether, after being made magnetic, it be properly balanced or not. The inaccuracy here indeed can be but very small, as arising only from dust or moisture. The method recommended by Mr. Cavallo, to obviate these inconveniences, is first to observe the dip of the needle, then to reverse its magnetism by the application of magnets, so that the end of it which before was elevated above the horizon may now be below it; and, lastly, to observe its dip again; for a mean of the two observations will be pretty near the truth, though the needle may not be perfectly balanced. See MAGNETISM, and MAGNETICAL NEEDLE.

In order to determine the law that regulates the inclination or dip of the needle, Biot, in a memoir delivered by himself and Humboldt to the French National Institute, on the Variations of the Terrestrial Magnetism in different Latitudes, supposed in the axis of the magnetic equator, and at equal distances from the centre of the earth, two centres of attractive forces, the one austral and the other boreal, so as to represent the two opposite magnetic poles of the earth: he then calculated the effect which ought to result from the action of these centres upon any point of the earth's surface, assuming the attractive force in the reciprocal ratio of the squares of the distances; he found that his results approximated more and more to the truth in proportion as the distance between the magnetic poles was assumed less; and, indeed, by supposing those two poles or centres to coincide, or the inclination of the magnetic needle to be produced by an indefinitely small magnet placed in the centre of the earth, his theorem gave the same numbers as had been observed by Humboldt both in Europe and in America, as well as what had been observed in Russia, Lapland, and various other places in both hemispheres: the results of theory being classed with those of observations in a comparative table, which clearly evinces their near coincidence. Let u be the angle included between a radius drawn from the earth's centre to any assumed point on its surface and the magnetic axis, β, the angle comprehended between the line coinciding with the real position of the needle and the said magnetic axis, and I the inclination of the needle with the horizon of the place; then we have

$$\text{I.} \qquad \tan \beta = \frac{\text{sin. } 2u}{\text{cos. } 2u + \frac{1}{3}};$$

whence β is readily determined; and then we shall have the inclination by means of the following:

$$\text{II.} \qquad \text{I} = 90^\circ + u - \beta.$$

Still it must be observed, that though these formulæ, given by Biot, furnished in general results very near the truth; yet when he attempted to represent the inclinations in different latitudes by the supposition of a magnet infinitely small, very near the centre of the earth, and perpendicular to the magnetic equator, he did not pretend to consider the hypothesis as any thing real, but solely as a mathematical abstraction.

DIPSACUS, teasel, in botany, a genus of the monogynia order, and tetrandria class of plants: CAL. is polyphillous, proper above; the receptacle paleaceous. There are four species: the most remarkable is the D. carduus fullonum, which grows wild in many parts of England. It is of singular use in raising the knap upon woollen cloth. For this purpose the heads are fixed round the circumference of a large broad wheel, which is made to turn round, and the cloth is held against them. In the west of England, great quantities of the plant are cultivated for this use. It is propagated by sowing the seeds in March, upon a well prepared soil. About one peck of seed is sufficient for an acre, as the plants must have room to grow; otherwise the heads will not be large enough, nor in great quantity. When the plants come up, they must be hoed in the same manner as is practised for turnips, cutting down all the weeds, and thinning the plants to about eight inches distant; and as they advance, and the weeds begin to grow again, they must be hoed a second time, cutting out the plants to a wider distance, so that they may finally stand a foot distant from each other. The second year they will shoot up heads which may be cut about the beginning of August. They are then to be tied up in bunches, and set in the sun

if the weather is fair: or, if not, in rooms to dry them. The common produce is about 160 bundles or staves upon an acre, which are sold for one shilling each. The leaves of the common wild teazel, dried, and given in powder or infusion, are a very powerful remedy against flatuses and crudities in the stomach. There is also another, though somewhat whimsical, use for which this plant is famous among the country people in England. If the heads are opened longitudinally, about September or October, there is generally found a small worm in them: one of these only is found in each head, whence naturalists have named it the vermis solitarius dipsaci. They collect three, five, or seven of these, always observing to make an odd number; and sealing them up in a quill, give them to be worn as an amulet against the ague. This superstitious remedy is in much higher repute than the bark, in many parts of England.

DIP'SAS. *n. s.* Lat. from *διψαω*, to thirst. A serpent whose bite produces the sensation of unquenchable thirst.

> Scorpion, and asp, and amphisbœna dire,
> Cerastes horned, hydrus, and ellops drear,
> And *dipsas*. *Milton.*

DIPTERA, from *δις* and *πτερον*, wing, in entomology, an order of insects, which have only two wings, and under each wing a style or oblong body, terminated by a protuberance, and called a balancer.

DIPTOTE, *n. s.* *Διπτωτα*. A noun consisting of two cases only.

DIPTYCH, *n. s.* Lat. *diptycha* (two leaves folded together). A register of bishops and martyrs.

> The commemoration of saints was made out of the *diptychs* of the church, as appears by multitudes of places in St. Austin. *Stillingfleet.*

DIPTYCH, or DIPTYCHA, in antiquity, was a public register, wherein were written the names of the consuls, and other magistrates, among the heathens; and of bishops, and living as well as dead brethren, among the Christians. The word is Greek, *διπτυχα*, the plural of *διπτυχον*, q. d. a book folded in two leaves; though there were some in three, and others in four or five leaves. This name is supposed to have been first given them to distinguish them from the books that were rolled, called volumina. There were profane diptycha in the Greek empire, as well as sacred ones in the Greek church.

DIPUS, Gr. *διπους*, i. e. two-footed, in zoology, the jerboa, a genus of quadrupeds, belonging to the order of glires, in the class mammalia. These animals were ranked by Linnæus under the genus mus; but Gmelin has, with great propriety, distributed the numerous and very different species of that genus, into nine new divisions, forming so many distinct genera, of which the dipus is one. The characters are these: there are two fore-teeth in each jaw; the tail is long, and tufted at the end; but the most striking characteristic of this genus is the enormous length of the hind feet, and extreme shortness of the fore paws. From this conformation, instead of walking or running on all fours, they leap or hop on the hind feet like birds, making prodigious bounds, and only use the fore paws for burrowing, or for carrying their food to the mouth like squirrels. 1. D. cafer, or the Cape jerboa, has four toes on the hind feet and five on the paws; the tail is very hairy, and tipt with black. This species inhabits the Cape of Good Hope, and is fourteen inches long; the tail fifteen, the ears three. It is called aerdmannetje, or little earth man, and springen haas, or leaping hare, by the Dutch at the Cape. It has a grunting voice; is very strong, and leaps twenty or thirty feet at one bound. It burrows with its fore feet; and sleeps sitting on its hind legs, with the knees separated, the head between, and holding its ears with the fore paws over its eyes. It is eaten by the natives; and is caught by pouring water into its hole, which compels it to come out. 2. D. jaculus, the common jerboa, or leaping mouse of Linnæus, has four toes on all the feet, and a claw in place of a thumb or fifth toe on each fore foot. The body is somewhat more than seven inches long, and the hind legs and thighs are longer than the body. The upper parts are of a pale tawny color, and the under parts white: the ears and feet are flesh-colored. The female has eight teats distantly placed. These animals inhabit Egypt, Arabia, Calmuck Tartary, and southern Siberia. They frequent firm hard ground, and fields covered with grass and herbs, where they form burrows of several yards long in a winding direction, leading to a large chamber about half a yard below the surface; and from this a second passage is dug to within a very little of the surface; by which they can escape when threatened with danger. When at rest, they sit with their hind legs bent under their belly, and keep the fore legs so near the throat as hardly to be perceptible. They eat grain and herbage like the hare. Their dispositions are mild, and yet they can never be perfectly tamed. This animal is roasted and eaten by the Arabs, who call it the lamb of the children of Israel. It has been particularly described by Mr. Bruce in his Abyssinian Travels. 3. D. sagitta, the Arabian jerboa, the mus *διπους* of the Greeks, and mus bipes of the Romans, has three toes on the hind feet, and no thumb or fifth toe on the fore paws. It is only about six inches long, and the tail rather shorter than the body; the soles of the hind feet and bottom of the toes are covered with a very thick coat of hair; the head is more rounded than that of the jaculus, and the ears are much longer than the head. It inhabits Arabia, and near the Irtish in Siberia, where it frequents the sandy plains. 4. D. Canadensis, or Canadian jerboa, is thus described by general Davies: 'As I conceive there are very few persons, however conversant in natural history, who may have seen or known that there was an animal existing in the coldest parts of Canada of the same genus with the jerboa, hitherto confined to the warmest climates of Africa, I take the liberty of stating the following particulars. With respect to the food, or the mode of feeding, of this animal, I have it not in my power to speak with any degree of certainty, as I could by no means procure any kind of sustenance that could induce it to eat; therefore, when caught, it lived only a day and a half. The first I was so fortunate as to catch, was taken in a large field near the Falls of Montmorenci, and, by its having

strayed too far from the skirts of the wood, allowed myself, assisted by three other gentlemen, to surround it, and after an hour's hard chase, to get it unhurt, though not before it was thoroughly fatigued, which might in a great measure accelerate its death. During the time the animal remained in its usual vigor, its agility was incredible for so small a creature. It always took progressive leaps of from three to four, and sometimes of five yards, although seldom above twelve or fourteen inches from the surface of the grass; but I have observed others in shrubby places, and in the woods, among plants, where they chiefly reside, leap considerably higher. When found in such places it is impossible to take them, from their wonderful agility, and their evading all pursuit, by bounding into the thickest part of the covert they can find. With respect to the figure given of it, in its dormant state, I have to observe, that the specimen was found by some workmen, in digging the foundation for a summer-house in a gentleman's garden, about two miles from Quebec, in the end of May, 1787. It was discovered enclosed in a ball of clay, about the size of a cricket-ball, nearly an inch in thickness, perfectly smooth within, and about twenty inches under ground. The man who first discovered it not knowing what it was, struck the ball with his spade, by which means it was broken to pieces, or the ball would have been presented to me. How long it had been under ground it is impossible to say; but, as I could never observe these animals in any part of the country after the beginning of September, I conceive they lay themselves up some time in that month, or beginning of October, when the frost becomes sharp. Nor did I ever see them again before the last week in May or beginning of June. From their being enveloped in balls of clay, without any appearance of food, I conceive they sleep during the winter, and remain for that term without sustenance. As soon as I conveyed this specimen to my house, I deposited it as it was, in a small chip box in some cotton, waiting with great anxiety for its waking, but that not taking place at the season they generally appear, I kept it until they found it begin to smell; I then stuffed it, and preserved it in its torpid position. I am led to believe its not recovering from that state arose from the heat of my room during the time it was in the box, a fire having been constantly burning in the stove, and which in all probability was too great for its respiration.'

DIRÆ, the general name of the three furies in the Pagan mythology. They were so called as being quasi Deorum iræ, the ministers of Divine vengeance in punishing guilty souls after death. They were the daughters of Acheron and Night.

DIRCA, in botany, a genus of the monogynia order and octandria class of plants: CAL. none: COR. tubular, with the limb indistinct: STAM. longer than the tube: BER. monospermous. Species one, a Virginian shrub.

DIRE, *adj.* } Lat. *dirus.* Dreadful;
DIRE'FUL, } terrible; dismal; extremely
DIRE'NESS, *n. s.* } evil.

But yet at last, whereas the *direful* fiend
She saw not stir, off shaking vain affright,
She nigher drew, and saw that joyous end;
Then God she prayed, and thanked her faithful knight. *Faerie Queene.*

Direful hap betide that hated wretch
That makes us wretched by the death of thee. *Shakspeare.*

Direness, familiar to my slaughterous thoughts,
Cannot once start me. *Shakspeare. Macbeth.*

Hydras, and gorgons, and chimæras *dire.* *Milton.*

Or what the cross *dire*-looking planet smites,
Or hurtful worm with cankered venom bites. *Id.*

The voice of God himself speaks in the heart of men, whether they understand it or no; and by secret intimations gives the sinner a foretaste of that *direful* cup, which he is like to drink more deeply of hereafter. *South.*

Discord! *dire* sister of the slaughtered power,
Small at her birth, but rising every hour;
While scarce the skies her horrid head can bound,
She stalks on earth, and shakes the world around. *Pope.*

Achilles' wrath, to Greeks the *direful* spring,
Of woes unnumbered, heavenly goddess! sing. *Id.*

Ah me! the *dire* effect
Of loitering here, of death defrauded long;
Of old so gracious, and let that suffice,
My very master knows me not.
I've been so long remembered I'm forgot. *Young.*

Unnumbered maladies his joints invade,
Lay siege to life, and press the *dire* blockade;
But unextinguished avarice still remains
And dreaded losses agravate his pains.
Johnson. Vanity of Human Wishes.

A brave man knows no malice, but at once
Forgets in peace the injuries of war,
And gives his *direst* foe a friend's embrace. *Cowper.*

DIRECT', *v. a.* & *adj.* } Fr. *diriger;* Span. and Ital. *dirizzar;*
DIREC'TER, *n. s.* } Port. *dirigir,* from
DIREC'TOR, } Lat. *dirigo, directus,*
DIREC'TION, } *à de* and *rego,* to govern. To aim or project in a straight line; to order, regulate, prescribe: a directer, or director, he who orders or commands; also a rule or ordinance, as well as any instrument that guides an operation, as in surgery: direction is having the power to guide or rule; directly is, rectilineally; in a straight course or line; apparently; immediately. Directness, straightness; plainness of conduct. See the following articles for particular uses of directory.
DIRECTIVE, *adj.*
DIRECT'LY, *adv.*
DIRECT'NESS, *n. s.*
DIREC'TORY.

The nobles of the people digged it, by the *direction* of the lawgiver. *Numb.* xxi. 18.

It is not in man that walketh to *direct* his steps. *Jer.* x. 23.

Infidels, being clean without the church, deny *directly*, and utterly reject, the very principles of Christianity, which hereticks embrace erroneously by misconstruction. *Hooker.*

They are glad to use counsellors and *directors* in all their dealings of weight, as contracts, testaments. *Id.*

A law, therefore, generally taken, is a *directive* rule unto goodness of operation. *Id.*

Even now
I put myself to thy *direction.* *Shakspeare. Macbeth.*

There be, that are in nature faithful and sincere, and plain and *direct*, not crafty and involved.
Bacon.

Men's passions and God's *directions* seldom agree.
King Charles.

The liker any thing is to wisdom, if it be not plainly the thing itself, the more *directly* it becomes its opposite. *Shaftesbury.*

Two geomantick figures were displayed
Above his head, a warrior and a maid,
One when *direct*, and one when retrograde.
Dryden's Fables.

The spear flew hissing thro' the middle space,
And pierced his throat, *directed* at his face.
Id. Æneid.

I am her *director* and her guide in spiritual affairs.
Dryden.

He that does this, will be able to cast off all that is superfluous; he will see what is pertinent, what coherent; what is *direct* to, what slides by, the question.
Locke.

All that is in a man's power, is to mind what the ideas are that take their turns in his understanding; or else to *direct* and sort, and call in such as he desires. *Id.*

Such was as then the state of the king, as it was no time by *direct* means to seek her. And such was the state of his captivated will, as he would delay no time of seeking her. *Sidney.*

On the *directive* powers of the former, and the regularity of the latter, whereby it is capable of *direction*, depends the generation of all bodies. *Grew.*

His work *directly* tends to raise sentiments of honour and virtue in his readers. *Addison. Freeholder.*

If the refracted ray be returned *directly* back to the point of incidence, it shall be refracted by the incident ray. *Newton's Optics.*

The *direction* of good works to a good end, is the only principle that distinguishes charity. *Smalridge.*

The manner of opening with a knife, is by sliding it on a *director*, the groove of which prevents its being misguided. *Sharp's Surgery.*

They argued from celestial causes only, the constant vicinity of the sun, and the *directness* of his rays; never suspecting that the body of the earth had so great an efficiency in the changes of the air. *Bentley.*

No particle of matter, nor any combination of particles, that is, no body, can either move of itself, or of itself alter the *direction* of its motion. *Cheyne.*

Common forms were not designed
Directors to a noble mind. *Swift.*

No reason can be assigned, why it is best for the world that God Almighty hath absolute power, which doth not *directly* prove that no mortal man should have the like. *Id.*

Two eagles from a mountain's height,
By Jove's command, *direct* their rapid flight. *Pope.*

All nature is but art unknown to thee,
All chance, *direction* which thou canst not see.
Id.

Nor visited by one *directive* ray,
From cottage streaming, or from airy hall.
Thomson.

That revelation, which God hath been pleased to make of his will to mankind, was designed rather to fit us for the future happiness, and *direct* our way to it, than open to us the particular glories of it, or distinctly show us what it is. *Mason.*

It is better to fail, if fail we must, in the paths of *direct* and manly, than of low and crooked wisdom.
Burke.

Call your light legions, tread the swampy heath,
Pierce with sharp spades the tremulous peat beneath.;
With colters bright the rushy sward bisect,
And in new veins the gushing rills *direct.* *Darwin.*

Direction, in mechanics, signifies the line or path of a body's motion, along which it endeavours to proceed according to the force impressed upon it.

Direction, Islands of, four small islands at the west entrance of the straits of Magellan, in the South Pacific Ocean. Long. 77° 19′ W., lat. 52° 27′ S.

Directors, in commercial polity, are considerable proprietors in the stocks of their respective companies, being chosen by plurality of votes from among the body of proprietors. The Dutch East India Company has sixty such directors; that of France, twenty-one; the British East India Company has twenty-four, including the chairman, who may be re-elected for four years successively. These last have salaries of £150 a year each, and the chairman £200. They meet at least once a week, and commonly oftener, being summoned as occasion requires. The directors of the Bank of England are twenty-four in number, including the governor and deputy-governor.

Director, in surgery, a grooved probe, to direct the edge of the knife or scissars, in opening sinuses or fistulæ, that the adjacent vessel, nerves, and tendons, may not be hurt.

The Directory of Public Worship was a celebrated book drawn up by the assembly of divines at Westminster, and established by an ordinance of parliament in 1644, repealing the statutes of Edward VI. and of Elizabeth, for uniformity in the common prayer. The Directory set aside the use of the liturgy, and allowed of no church-music besides that of singing the Psalms. The Directory was so called, in part, because it only points out certain topics of prayer, on which the minister might enlarge. The whole apocrypha was rejected; and both private baptism and lay baptism, with the use of godfathers and godmothers, and the sign of the cross. In the sacrament of the Lord's supper, no mention is made of private communion or administering it to the sick. The altar with rails was changed into a communion table, about which the people might stand or sit; kneeling not being thought so proper a posture. Lightfoot, Selden, and others, were for open communion, to which the parliament also most inclined, in opposition to those presbyterians who were for granting powers of admission or rejection to the ministers and elders, and to the independents who were for committing them to the whole brotherhood; but it was agreed, that the minister, before the communion, should 'warn, in the name of Christ, all such as are ignorant, scandalous, profane, or that live in any sin or offence against their knowledge or conscience, that they presume not to come to that holy table, showing them, that he that eateth and drinketh unworthily, eateth and drinketh judgment to himself.' The prohibition of marriage in Lent, and the use of the ring, were laid aside. In the visitation of the sick no mention is made of private confession, or authoritative absolution.

No service is appointed for the burial of the dead. All particular vestments for priests or ministers, and all saints'-days, were discarded. It has been remarked, as a considerable omission, that the Directory does not enjoin the reading of the apostles' creed, and the ten commandments. However, these were added to the assembly's confession of faith, which was published a year or two afterwards. This Directory continued in use till the restoration of king Charles II., when, the constitution being restored, the old liturgy took place again; the ordinance for its repeal having never obtained the royal assent. The revolution, thus occasioned in the form of public worship, did not take place for a considerable time over the whole kingdom. In some parts of the country the churchwardens could not procure a Directory; and in others they despised it, and continued the old common prayer book; some would read no form, and others used one of their own. In order to enforce the use of the Directory, the parliament, by an ordinance, dated August 23rd, 1645, called in all common prayer books, and imposed a fine upon those ministers who should read any other form than that contained in the Directory. By the same ordinance, which continued till the Restoration, to preach, write, or print any thing in derogation or depraving of the Directory, subjected the offender, upon indictment, to a discretionary fine, not exceeding £50.

Directory, in a more modern sense, was used as the title of the supreme executive power, according to the new constitution, formed by the French convention after the fall of Robespierre, and presented to the primary assemblies for acceptance in August, 1795. By this constitution the legislative body was composed of what they called a Council of Ancients and a Council of Five Hundred. The whole of this fabric, it is well known, was overturned by the successful ambition of Napoleon: but as it directed the energies of a numerous, if not a great, people for a considerable period, we may here perpetuate its forms. The executive power was entrusted to a Directory of five members, nominated by the legislative body as follows:—1. The Council of Five Hundred formed a list by ballot of three times the number to be nominated, and presented it to the Council of Ancients, which chose out of this list by ballot. 2. The members of the Directory were to be forty years of age at least. 3. After the ninth year of the republic, they were to be chosen only from among those citizens who had been members of the Legislative Body, or the Administration, or General Agents of Execution. 4. Members of the legislative body could not be elected members of the Directory, either during the continuance of their legislative functions, or during the first year after their expiration. 5. The Directory was partially renewed by the annual election of a new member. 6. No ci-devant director could be re-elected till after an interval of five years. 7. The ascendant and descendant in the direct line; the brother, uncle, and nephew; connexions by marriage in the same degrees, and cousins in the first degree, could not be members of the Directory at the same time, nor succeed one another in it, till after an interval of five years. 8. In case of death, removal, or resignation of a member of the Directory, his successor was elected within ten days. The Council of Five Hundred were obliged to propose the candidates within the first five days, and the Council of Ancients to complete the election within the last five. The new member could only continue in office for the remaining period of the person he succeeded, unless it did not exceed six months, in which case, he continued five years and a half in office. 9. Each director was to preside in rotation for three months only. 10. The president was to sign and keep the seal. 11. The laws and acts of the legislative body were addressed to the Directory, in the person of its president. 12. The Directory could not deliberate unless three members were present. 13. A secretary was chosen (not one of its members), who countersigned despatches, and drew up deliberations, in a register, wherein each member might also enter his opinion, with his reasons. 14. The Directory could deliberate without the aid of the secretary, and one of the directors might record its resolutions in a particular register. 15. The Directory provided for the security of the public according to the laws, issued proclamations; &c. It disposed of the armed force; but none of its members could command it, either while they continued in office, or for two years after. 16. The Directory, upon hearing of any conspiracy against the republic, might order the supposed authors or accomplices to be apprehended, and interrogate them; but were bound, under the penalty of arbitrary imprisonment to remit them to an officer of police, within two days, to proceed with them according to law. 17. The Directory nominated the generals, but could not choose them among the relations of its members, within the degrees above-mentioned. 18. It superintended the execution of the laws by commissaries of its nomination. 19. It nominated the general agents of execution, but not of its own members, and recalled them at pleasure. 20. It determined their number and functions. 21. It nominated all receivers of direct taxes. 22. As well as the superintendants of indirect contributions, and the administration of national domains. 23. It superintended the coinage of money, and nominated the officers charged with it. 24. No Director could go out of the territory of the republic, till two years after he was out of office; but was obliged to certify his place of residence during that interval to the legislative body. 25. The Directory was responsible for the non-execution of laws, and for the abuses which it did not denounce. 26. Its agents were respectively responsible for the non-execution of the laws, and orders of the directory. 27. Its members might be tried by the legislative body for acts of treason, corruption, embezzlement of public money, and all capital crimes as to their official conduct. 28. They were subject to the jurisdiction of the tribunals for ordinary and private offences; but they could not be arrested except in the case of flagrans delictum, or brought to trial without the authority of the legislative body.

Every denunciation against the Directory, or

any of its members, was addressed to the Council of Five Hundred. If, after deliberation, the Council admitted the denunciation, it declared it in these terms: the denunciation against—for the fact of—dated—signed by—is admitted. The party was then cited, and heard in the interior place of the Council of Five Hundred; who declared whether there was ground for examining his conduct. He was then heard by the Council of Ancients at the bar; and, if he was deemed culpable, the Council proceeded to accusation, which was followed by suspension, when the accused was sent before the High Court of Justice, which was to proceed to trial without delay. If the party was acquitted, he resumed his functions.

The Legislative Body could not cite the Directory, nor any of its members, except in the case above specified. The accounts and information demanded of the Directory by the Legislative Body were furnished in writing. On the opening of a session of the Legislative Body, the Directory were obliged to present to it an estimate of expenses, the state of the finances, pensions, &c., with the abuses that had come to its knowledge. It might invite the Legislative Body to take a subject into consideration; but could not propose legislative dispositions, except with regard to peace and war. No member of the Directory durst be absent more than five days, nor remove above four myriametres, or ten leagues, from his usual residence, without being authorised by the Legislative Body. The members of the Directory could only appear in an appropriate dress. They had a constant guard of 120 infantry and 120 cavalry, who attended them in public processions, in which they had always the first rank. Each member was attended out of doors by two guards; and was entitled to the superior military honors from every post of armed force. The Directory resided in the same commune with the Legislative Body, at the expense of the republic. The salary of each was fixed at the value of 50,000 myriagrammes, about 10,000 quintals of wheat.

DIREPTION, *n. s.* Lat. *direptio*. The act of plundering.

DIRGE, *n. s.* This is from the Teutonic *dyrke, laudare*, to praise and extol, says Dr. Johnson, after Verstegan, 'whence it is possible their dyrke, and our dirge, was a laudatory song to commemorate and applaud the dead. Bacon apparently derives it from *dirige*.' A mournful ditty; a song of lamentation.

The imperial jointress of this warlike state
Have we, as 'twere, with a defeated joy,
With mirth in funeral, and with *dirge* in marriage.
In equal scale weighing delight and dole,
Taken to wife. *Shakspeare. Hamlet.*

Meanwhile, the body of Richard, after many indignities and reproaches, the *diriges* and obsequies of the common people towards tyrants, was obscurely buried. *Bacon.*

All due measures of her mourning kept,
Did office at the *dirge*, and by infection wept.
Dryden.

What though no sacred earth allow thee room,
Nor hallowed *dirge* be muttered o'er thy tomb,
Yet shall thy grave with rising flowers be drest,
And the green turf lie lightly on thy breast. *Pope.*

Betrothed beauty bending o'er his bier
Breathes the loud sob, and sheds the incessant tear;
Pursues the sad procession, as it moves
Through winding avenues and waving groves;
Hears the slow *dirge* amid the echoing aisles,
And mingles with her sighs discordant smiles.
Darwin.

DIRIBITORES, among the Romans, officers appointed to distribute tablets to the people at the comitia. See COMITIA.

DIRIGENT, *adj.* Lat. *dirigens*.

The *dirigent* line in geometry is that along which the line describent is carried in the generation of any figure. *Harris.*

DIRK, *n. s.* Goth. *dorg*; Sax. dork; Isl. *turric*. A kind of dagger used in the Highlands of Scotland.

In vain thy hungry monntaineers
Come forth in all their warlike geers,
The shield, the pistol, *dirk*, and dagger,
In which they daily wont to swagger. *Tickell.*

And in the fire his recent rags they scattered,
And dress'd him, for the present, like a Turk,
Or Greek—that is, although it not much mattered,
Omitting turban, slippers, pistols, *dirk*.
Byron. Don Juan.

DIRKE, *v. a.* To spoil; to ruin. Obsolete.

Thy waste bigness but cumbers the ground,
And *dirkes* the beauties of my blossoms round.
Spenser.

DIRT, *n. s.* }
DIRT'ILY, *adv.* }
DIRT'INESS, *n. s.* }
DIRT'Y, *v. a.* & *adj.* } Dut. and Goth *dryt*; Islandic, *dirt*. Mud; filth; mire; any thing that sticks to the clothes or body; any thing mean.

For whom I made all thingis peyrement and I deeme as *dyrt*, that I wyne Crist.
Wiclif. Filipensis, 3.

Their fell contention still increased more,
And more thereby increased furor's myght,
That he his foe has hurt and wounded sore,
And him in blood and *dirt* deformed quight.
Spenser. Faerie Queene.

Or were it such gold as that wherewithal
Almighty chimiques from each mineral,
Having by subtile fire a soul out-pulled,
Are *dirtily* and desperately gulled, *Donne.*

Thy Dol and Helen of thy noble thoughts
Is in base durance, and contagious prison,
Hauled thither by mechanic, *dirty* hands.
Shakspeare.

Such employments are the diseases of labour, and the rust of time, which it contracts not by lying still, but by *dirty* employment. *Taylor's Holy Living.*

Marriages would be made up upon more natural motives than mere *dirty* interests, and increase of riches without measure or end. *Temple.*

Numbers engage their lives and labours to heap together a little *dirt* that shall bury them in the end. *Wake.*

Pound an almond, and the clear white colour will be altered into a *dirty* one, and the sweet taste into an oily one. *Locke.*

They come at length to grow sots and epicures, mean in their discourses, and *dirty* in their practices. *South.*

Is yellow *dirt* the passion of thy life,
Look but on Gripus, or on Gripus' wife. *Pope.*

Ill company is like a dog, who *dirts* those most whom he loves best. *Swift.*

The god of day
A tripod gives, amid the crowded way,
To raise the *dirty* foot, and ease his toil. *Gay.*

The lords Strutts lived generously, and never used to *dirty* their fingers with pen, ink, and counters. *Arbuthnot.*

DIRUP'TION, *n. s.* Lat. *diruptio.* The act or state of bursting or breaking.

DIS, in mythology, a god of the Gauls, the same as Pluto, the god of hell. The ancient inhabitants of Gaul supposed themselves descended from that deity.

DISA, in botany, a genus of the diandria order and gynandria class of plants. The spatha is univalvular; the petals three; the third smaller than the rest, bifid, and gibbous, at the base. Species four, all Cape plants.

DISA'BLED, *v. a.* } Of *dis*, and ABLE,
DISABIL'ITY, *n. s.* } which see. To deprive of force or power; to disqualify; impair; to declare deficient. Disability is the want of power, aptitude, or legal right to do a thing.

Our consideration of creatures, and attention unto scriptures, are not in themselves things of like *disability* to breed or beget faith. *Hooker.*

Many withdrew themselves out of pure faintness, and *disability* to attend the conclusion. *Raleigh.*

I have *disabled* mine estate,
By shewing something a more swelling port
Than my faint means would grant continuance. *Shakspeare.*

Farewell, Monsieur Traveller; look you lisp, and wear strange suits; *disable* all the benefits of your own country. *Id.*

The invasion and rebellion did not only *disable* this king to be a conqueror, but deprived him both of his kingdom and life. *Davies's Ireland.*

I will not *disable* any for proving a scholar, nor yet dissemble that I have seen many happily forced upon the course to which by nature they seemed much indisposed. *Wotton.*

Nor so is overcome
Satan, whose fall from heaven, a deadlier bruise
Disabled not to give thee thy death's wound. *Milton.*

A Christian's life is a perpetual exercise, a wrestling and warfare, for which sensual pleasure *disables* him, by yielding to that enemy with whom he must strive. *Taylor's Holy Living.*

I have known a great fleet *disabled* for two months, and thereby lose great occasions by an indisposition of the admiral. *Temple.*

Your days I will alarm, I'll haunt your nights,
And worse than age *disable* your delights. *Dryden.*

He that knows most of himself, knows least of his knowledge, and the exercised understanding is conscious of its *disability*. *Glanville.*

The ability of mankind does not lie in the impotency or *disabilities* of brutes. *Locke.*

This disadvantage which the dissenters at present lie under, of a *disability* to receive church preferments, will be easily remedied by the repeal of the test. *Swift.*

A suit is commenced in a temporal court for an inheritance; and the defendant pleads, in *disability*, that the plaintiff is a bastard. *Ayliffe's Parergon.*

Foiled, bleeding, breathless, furious to the last,
Full in the centre stands the bull at bay,
Mid wounds, and clinging darts, and lances brast,
And foes *disabled* in the brutal fray. *Byron.*

DISABILITY, in law, is when a man is disabled, or made incapable to inherit any lands, or take that benefit which otherwise he might have done. This may happen four ways: 1st, by the act of an ancestor: 2d, of the party: 3d, by the act of God: or, 4th, of the law. 1. Disability by the act of the ancestor is where the ancestor is attainted of high treason, &c., which corrupts the blood of his children, so that they may not inherit his estate. 2. Disability by the act of the party is where a man binds himself by obligation, that, upon surrender of a lease, he will grant a new estate to a lessee; and afterwards he grants over the reversion to another, which puts it out of his power to perform it. 3. Disability by the act of God is where a man is non sanæ memoriæ, whereby he is incapable to make any grant, &c. So that, if he passes an estate out of him, it may, after his death, be made void; but it is a maxim in law, 'that a man of full age shall never be received to disable his own person.' 4. Disability by the act of the law is where a man, by the sole act of the law, without any thing by him done, is rendered incapable of the benefit of the law; as an alien born, &c.

DISABUSE', *v. a.* *Dis* and ABUSE, which see. To deliver from mistake or delusion.

The imposture and fallacy of our senses impose not only on common heads, but even more refined mercuries, who have the advantages of an improved reason to *disabuse* you. *Glanville's Scepsis.*

Those teeth fair Lyce must not show,
If she would bite: her lovers, though
Like birds they stoop at seeming grapes,
Are *disabused* when first she gapes. *Waller.*

If by simplicity you meant a general defect in those that profess angling, I hope to *disabuse* you. *Walton's Angler.*

Chaos of thought and passion, all confused;
Still by himself abused or *disabused*. *Pope.*

DISACCOMMODA'TION, *n. s.* *Dis* and accommodation. The state of being unfit or unprepared.

Devastations have happened in some places more than in others, according to the accommodation or *disaccommodation* of them to such calamities. *Hale's Origin of Mankind.*

DISACCUS'TOM, *v. a.* *Dis* and accustom. To destroy the force of habit by disuse, or contrary practice.

DISACKNOWL'EDGE, *v. a.* *Dis* and acknowledge. Not to acknowledge.

The manner of denying Christ's deity here prohibited, was, by words and oral expressions verbally to deny and *disacknowledge* it. *South.*

DISACQUAIN'TANCE, *n. s.* *Dis* and acquaintance. Disuse of familiarity.

Conscience, by a long neglect of, and *disacquaintance* with itself, contracts an inveterate rust or soil. *South.*

DISADVAN'TAGE, *v. a.* & *n. s.* } *Dis* and
DISADVAN'TAGEABLE, *adj.* } advantage.
DISADVANTA'GEOUS, *adj.* } To injure;
DISADVANTA'GEOUSLY, *adv.* } impair.

Loss; injury to interest; diminution of any thing desirable; a state of weak defence.

No fort can be so strong,
Ne fleshly breast can armed be so sound,
But will at last be won with battery long;
Or unawares at *disadvantage* found.
Faerie Queene.

In clearing of a man's estate, he may as well hurt himself in being too sudden, as in letting it run on too long; for hasty selling is commonly as *disadvantageable* as interest. *Bacon.*

Chaucer in many things resembled Ovid, and that with no *disadvantage* on the side of the modern author. *Dryden.*

A multitude of eyes will narrowly inspect every part of an eminent man, consider him nicely in all views, and not be a little pleased when they have taken him in the worst and most *disadvantageous* lights. *Addison's Spectator.*

Their testimony will not be of much weight to its *disadvantage*, since they are liable to the common objection of condemning what they did not understand. *Swift.*

An approving nod or smile serves to drive you on, and make you display yourselves more *disadvantageously*. *Government of the Tongue.*

Mr. Pope's bodily *disadvantages* must incline him to a more laborious cultivation of his talent, without which he foresaw that he must have languished in obscurity. *Shenstone.*

Methinks I am like a man who, having struck on many shoals, and having narrowly escaped shipwreck in passing a small firth, has yet the temerity to put out to sea in the same leaky weather-beaten vessel, and even carries his ambition so far as to think of compassing the globe under these *disadvantageous* circumstances. *Hume on Human Nature.*

DISADVEN'TUROUS *adj.* *Dis* and adventurous. Unhappy; unprosperous.

Now he hath left you here,
To be the record of his rueful loss,
And of my doleful *disadventurous* death.
Faerie Queene.

DISAFFECT', *v. a.* DISAFFEC'TED, *part. adj.* DISAFFEC'TEDLY, *adv.* DISAFFEC'TEDNESS, *n. s.* DISAFFEC'TION. *Dis* and affect. To fill with discontent; to discontent; to make less faithful or zealous.

They had attempted to *disaffect* and discontent his majesty's late army. *Clarendon.*

In making laws, princes must have regard to the public dispositions, to the affections and *disaffections* of the people; and must not introduce a law with public scandal and displeasure. *Taylor's Rule of Holy Living.*

By denying civil worship to the emperor's statues, which the custom then was to give, they were proceeded against as *disaffected* to the emperor. *Stillingfleet.*

The disease took its original merely from the *disaffection* of the part, and not from the peccancy of the humours. *Wiseman.*

DISAFFIR'MANCE, *n. s.* *Dis* and affirm. Confutation; negation.

That kind of reasoning which reduceth the opposite conclusion to something that is apparently absurd, is a demonstration in *disaffirmance* of any thing that is affirmed. *Hale.*

To DISAFFOR'EST, *v. a.* *Dis* and forest. To throw open to common purposes; to reduce from the privileges of a forest.

The commissioners of the treasury moved the king to *disafforest* some forests of his, explaining themselves of such forests as lay out of the way, not near any of the king's houses. *Bacon.*

How happy's he, which hath due place assigned
To his beasts; and *disafforested* his mind! *Donne.*

DISAGREE', *v. n.* DISAGREE'ABLE, *adj.* DISAGREE'ABLY, *adv.* DISAGREE'ABLENESS, *n. s.* DISAGREE'MENT. *Dis* and agree. To differ; to be in opposition: disagreeable is, unsuitable; displeasing. Disagreement, dissimilitude; diversity of sentiment; quarrel.

They seemed one to cross another, as touching their several opinions about the necessity of sacraments, whereas in truth their *disagreement* is not great. *Hooker.*

It containeth many improprieties, *disagreeing* almost in all things *from* the true and proper description. *Browne.*

Why both the bands in worship *disagree*,
And some adore the flower, and some the tree.
Dryden.

A father will hug and embrace his beloved son, for all the dirt and foulness of his cloaths; the dearness of the person easily apologizing for the *disagreeableness* of the habit. *South.*

The mind clearly and infallibly perceives all distinct ideas to *disagree*; that is, the one not to be the other. *Locke.*

To make the sense of esteem or disgrace sink the deeper, and be of the more weight, either agreeable or *disagreeable* things should constantly accompany these different states. *Id.*

Strange it is, that they reject the plainest sense of scripture, because it seems to *disagree with* what they call reason. *Atterbury.*

Some demon, an enemy to the Greeks, had forced her to a conduct *disagreeable* to her sincerity. *Broome.*

Do you not sometimes find dull *disagreeable* ideas annexed to certain places, seasons, or employments, which give you a secret aversion to them? *Mason.*

DISALLOW', *v. a.* & *n. s.* DISALLOW'ABLE, *adj.* DISALLOW'ANCE, *n. s.* *Dis* and allow. To deny in respect to authority, legality, or propriety; to refuse permission. Disallowance is prohibition.

God doth in converts, being married, allow continuance with infidels, and yet *disallow* that the faithful, when they are free, should enter into bonds of wedlock with such. *Hooker.*

Neutrality is always a thing dangerous, and *disallowable*. *Raleigh.*

When, said she,
Were those first councils *disallowed* by me?
Or where did I at sure tradition strike,
Provided still it were apostolic?
Dryden's Hind and Panther.

God accepts of a thing suitable for him to receive, and for us to give, where he does not declare his refusal and *disallowance* of it. *South.*

It was known that the most eminent of those who professed his own principles, publickly *disallowed* his proceedings. *Swift.*

DISAN'CHOR, *v. a.* From *dis* and anchor. To drive a ship from its anchor.

DISANIMATE, *v. a.* } *Dis* and animate.
DISANIMATION, *n. s.* } To deprive of life; to discourage; deject.

The presence of a king engenders love amongst his subjects and his loyal friends, as it *disanimates* his enemies. *Shakspeare. Henry VI.*

They cannot in reason retain that apprehension after death, as being affections which depend on life, and depart upon *disanimation*.
Browne's Vulgar Errours.

To call the pearly drops from Pity's eye,
Or stay Despair's *disanimating* sigh,
Whether, O friend of art! the gem you mould
Rich with new taste, with ancient virtue bold.
Darwin.

DISANNUL', *v. a.* } *Dis* and annul. This
DISANNUL'LING, *n. s.* } word, as Dr. Johnson observes, is formed, contrarily to analogy and by the needless use of the negative particle. It ought therefore to be rejected, as ungrammatical and barbarous. To annul; to deprive of authority; to vacate; to make void.

The covenant that was confirmed before of God in Christ, the law which was four hundred and thirty years after, cannot *disannul*, that it should make the promise of none effect. *Gal.* iii. 17.

The Jews ordinances for us to resume, were to check our Lord himself, which hath *diannulled* them.
Hooker,

That gave him power of *disannulling* of laws, and disposing of men's fortunes and estates, and the like points of absolute power, being in themselves harsh and odious. *Bacon.*

Wilt thou my judgments *disannul?* Defame
My equal rule, to clear thyself of blame?
Sandys.

DISAPPEAR', *v. n.* Fr. *disparoitre*. To be lost to view; to vanish out of sight; to fly; to go away.

She *disappeared*, and left me dark! I waked
To find her, or for ever to deplore. *Milton.*

When the night and winter *disappear*,
The purple morning rising with the year
Salutes the spring. *Dryden.*

If at your coming princes *disappear*,
Comets! come every day—and stay a year.
Dr. Johnson's Poems.

DISAPPOINT', *v. a.* } Old Fr. *desa-*
DISAPPOINTMENT, *n. s.* } *pointer*. To defeat expectation; to delude; cheat; deprive; taking *of* before the thing lost by disappointment.

Our comfortable expectations in earthly things do not seldom *disappoint* us. *Bp. Hall. Contemplations.*

The superior Being can defeat all his designs, and *disappoint* all his hopes. *Tillotson.*

If we are *disappointed*, we are still no worse than the rest of our fellow mortals; and if we succeed in our expectations, are eternally happy. *Burnet.*

How many *disappointments* have, in their consequences, saved a man from ruin! *Spectator.*

Whilst the champion, with redoubled might,
Strikes home the javelin, his retiring foe
Shrinks from the wound, and *disappoints* the blow.
Addison.

There's nothing like surprising the rogues! How will they be *disappointed*, when they hear that thou hast prevented their revenge!
Arbuthnot's Hist. of John Bull.

DISAPPOINTMENT ISLANDS, a cluster of small islands in the South Pacific Ocean, discovered by commodore Byron in 1765, who gave them this name from the shores affording no anchorage for his ships. This obliged him to quit them without landing, or procuring any refreshments for his crew. The inhabitants appeared on the beach armed with spears full sixteen feet long; and they every where discovered hostile intentions. These islands abound with cocoa trees, and turtles are plentiful on the coast. Long. 145° 4′ W. lat. from 14° 5′ to 14° S.

DISAPPOINTMENT ISLAND is also a name given by captain Wilson in 1797 to an island in the South Sea, one of the Duff's group, in E. long. 167°, and S. lat. 9° 57′. See DUFF.

DISAPPROVE', *v. a.* } Fr. *desapprouver*.
DISAPPROBA'TION, *n. s.* } To dislike; to censure; expressive of dislike.

I reasoned much, alas! but more I loved;
Sent and recalled, ordained, and *disapproved*.
Prior.

Without good breeding truth is *disapproved*;
That only makes superior sense beloved. *Pope.*

He was obliged to publish his letters, to shew his *disapprobation* of the publishing of others. *Id.*

DISARM', *v. a.* Fr. *desarmer*. To spoil or divest of arms; to deprive of arms.

An order was made by both houses, for *disarming* all the papists in England. *Clarendon.*

I am still the same,
By different ways still moving to one fame;
And by *disarming* you I now do more
To save the town, than arming you before.
Dryden.

Then, where Nemea's howling forests wave,
He drives the lion to his dusky cave;
Seized by the throat the growling fiend *disarms*,
And tears his gaping jaws with sinewy arms.
Darwin.

DISARMING, in law, the prohibiting people to wear arms. It is an offence by the common law of England for persons to go or ride armed with dangerous and uncommon weapons: though gentlemen may wear common armour, according to their quality. It is also ordained by statute, that no persons shall come before the king's justices with force of arms, on pain of imprisonment, &c. We have noticed the introduction of the celebrated disarming act of Scotland into the Highlands, under the article CLAN.

DISARRAY', *v. a.* & *n. s.* *Dis* and array. To undress any one; to divest of clothes; undress; disorder.

So, as she bad, the witch they *disarrayed*.
Faerie Queene.

He returned towards the river, to prevent such danger as the *disarray*, occasioned by the narrowness of the bridge, might cast upon them. *Hayward.*

Disarray and shameful rout ensue,
And force is added to the fainting crew.
Dryden's Fables.

Phrase that time hath flung away,
Uncouth words in *disarray*,
Tricked in antique ruff and bonnet,
Ode, and elegy, and sonnet.
Dr. Johnson's Poems.

DISASSIDU'ITY, *n. s.* Absence of care or attention.

The Cecilians kept him back; as very well knowing that, upon every little absence or *disassiduity*, he should be subject to take cold at his back. *Wotton.*

DISASTER, *v. a.* & *n. s.* } Fr. and Span. *desastre*; Ital. *desastro*; from Lat. *dis*, adverse, and *astra*, the stars, under adverse stars. Misfortune; grief, calamity: disastrous is, unfortunate; portending disaster.
DISAS'TROUS, *adj.* }
DISAS'TROUSLY, *adv.* }

Stars shone with trains of fire, dews of blood fall;
Disasters veiled the sun; and the moist star,
Upon whose influence Neptune's empire stands,
Was sick almost to doomsday with eclipse.
Shakspeare.

These are the holes where eyes should be, which pitifully *disaster* the cheeks. *Id.*

The moon,
In dim eclipse, *disastrous* twilight sheds
On half the nations. *Milton.*

Ah, chaste bed of mine, said she, which never heretofore couldst accuse me of one defiled thought, how canst thou now receive that *disastered* changeling? *Sidney.*

Immediately after his return from this very expedition, such *disastrous* calamities befel his family, that he burnt two of his children himself. *South.*

This day black omens threat the brightest fair,
That e'er deserved a watchful spirit's care;
Some dire *disaster*, or by force or slight;
But what, or where, the fates have wrapt in night.
Pope.

In his own fields, the swain
Disastered stands. *Thomson.*

DISAVOW', *v. a.* } *Dis* and avow. To disown; to deny knowledge of; to deny concurrence in any thing, or with any person: denial.
DISAVOW'AL, *n. s.* }
DISAVOW'MENT. }

But being aged now, and weary too,
Of warres delight and worlds contentious toyle,
The name of knighthood he did *disavow*.
Spenser. Faerie Queene.

A man that acts below his rank, doth but *disavow* fortune, and seemeth to be conscious of his own want in worth, and doth but teach others to envy him. *Bacon.*

As touching the Tridentine history, his holiness will not press you to any *disavowment* thereof. *Wotton.*

He only does his conquest *disavow*,
And thinks too little what they found too much.
Dryden.

We are reminded by the ceremony of taking an oath, that it is a part of that obedience which we learn from the gospel, expressly to *disavow* all evasions and mental reservations whatsoever. *Addison's Freeholder.*

An earnest *disavowal* of fear often proceeds from fear. *Clarissa.*

To DISAU'THORIZE, *v. a.* *Dis* and authorize. To deprive of credit or authority.

The obtrusion of such particular instances as these, are insufficient to *disauthorise* a note grounded upon the final intention of nature. *Wotton.*

DISBAND', *v. a.* & *v. n.* Old Fr. *desbander*. To dismiss from military service; to retire; be dismissed; broke up.

Our navy was upon the point of *disbanding*, and many of our men come ashore. *Bacon. War with Spain.*

The ranged powers
Disband, and wandering each his several way
Pursues. *Milton.*

The common soldiers, and inferior officers, should be fully paid upon their *disbanding*. *Clarendon.*

Pythagoras bids us in our station stand,
Till God, our general, shall us *disband*. *Denham.*

I am content to lead a private life;
Disband my army to secure the state.
Dryden's Aurengzebe.

Were it not for some small remainders of piety and virtue which are yet left scattered among mankind, human society would in a short space *disband* and run into confusion, and the earth would grow wild and become a forest. *Tillotson.*

Bid him *disband* his legions. *Addison's Cato.*

Some imagine that a quantity of water, sufficient to make such a deluge, was created upon that occasion; and, when the business was done, all *disbanded* again, and annihilated. *Woodward.*

DISBARK', *v. a.* Fr. *debarquer*. To land from a ship; to put on shore.

Together sailed they, fraught with all the things
To service done by land that might belong,
And, when occasion served, *disbarked* them.
Fairfax.

The ship we moor on these obscure abodes;
Disbark the sheep an offering to the gods.
Pope's Odyssey.

DISBELIEVE', *v. a.* } From *dis* and beDISBELIEV'ER, *n. s.* } lieve. Not to credit; one who refuses belief; one who denies any position to be true.

The thinking it impossible his sins should be forgiven, though he should be truly penitent, is a sin, but rather of infidelity than despair; it being the *disbelieving* of an eternal truth of God's. *Hammond's Practical Catechism.*

Our belief or *disbelief* of a thing does not alter the nature of the thing. *Tillotson.*

Such who profess to *disbelieve* a future state, are not always equally satisfied with their own reasonings. *Atterbury.*

An humble soul is frightened into sentiments, because a man of great name pronounces heresy upon the contrary sentiments, and casts the *disbeliever* out of the church. *Watts.*

DISBENCH', *v. a.* *Dis* and bench. To drive from a seat.

Sir, I hope
My words *disbenched* you not?
——No, Sir; yet oft,
When blows have made me stay, I fled from words.
Shakspeare.

DISBRANCH', *v. a.* *Dis* and branch. To separate, or break off, as a branch from a tree.

She that herself will sliver and *disbranch*
From her maternal sap, perforce must wither,
And come to deadly use. *Shakspeare. King Lear.*

Such as are newly planted need not be *disbranched* till the sap begins to stir, that so the wound may be healed without a scar. *Evelyn's Kalendar.*

DISBUD', *v. a.* With gardeners. To take away the branches or sprigs newly put forth, that are ill placed.

DISBUR'DEN, *v. a.* *Dis* and burden. To ease of a burden; to unload.

The river, with ten branches or streams, *disburdens* himself within the Persian Sea. *Peacham on Drawing.*

We shall *disburden* the piece of those hard shadowings, which are always ungraceful.

Dryden's Dufresnoy.

They removed either by casualty and tempest, or by intention and design, either out of lucre of gold, or for the *disburdening* of the countries surcharged with multitudes of inhabitants.

Hale's Origin of Mankind.

Disburdened Heaven rejoiced. *Milton.*

Lucia, *disburden* all thy cares on me,
And let me share thy most retired distress.

Addison's Cato.

To DISBURSE', *v. a.* Fr. *debourser; dis* and burse. To spend or lay out money.

The queen's treasure, in so great occasions of *disbursements*, is not always so ready, nor so plentiful, as it can spare so great a sum together.

Spenser's Ireland.

Nor would we deign him burial for his men,
Till he *disbursed* ten thousand dollars. *Shakspeare.*

As Alexander received great sums, he was no less generous and liberal in *disbursing* of them.

Arbuthnot on Coins.

DISC, in antiquity, a quoit made of stone, iron, or copper, five or six fingers broad, and above a foot long, somewhat of an oval figure. It was hurled like a bowl to a vast distance, by the help of a leathern thong, tied round the thrower's hand and put through a hole in the middle. According to Ovid, Met. 10, Apollo laid down his divinity, and abandoned the charge of his oracle at Delphi, to go to Sparta to play at the discus, where he mortally wounded his favorite Hyacinthus. Pausanias gives the invention of the game to Perseus, the son of Jupiter and Danae, who had the misfortune to kill his maternal grandfather Acrisius with his disc.

The game of discus was in practice at the time of the Trojan war. The myrmidons of Achilles practised it, during their leader's inaction, on the sea-shore, while burning with ire against Agamemnon. Homer also records it as among the gymnastic sports given at the funereal obsequies of Patroclus, with an iron discus.

Disc, in astronomy, the face of the sun and moon, as they appear to us on the earth; or the face of the earth as it appears to a spectator in the moon.

Disc, in optics, the wideness of the aperture of a telescopic glass, whether plain, convex, concave, or of any other form.

DISCAL'CEATED, *adj.* } Lat. *discalceatus.*
DISCALCEA'TION, *n. s.* } Stripped of shoes: the act of pulling off the shoes.

The custom of *discalceation*, or putting off their shoes at meals, is conceived to have been done, as by that means keeping their beds clean.

Browne's Vulgar Errours.

DISCAN'DY, *v. n.* From *dis* and candy. To dissolve; to melt.

The hearts
That spanieled me at heels, to whom I gave
Their wishes, do *discandy*, melt their sweets
On blossoming Cæsar. *Shakspeare.*

DISCARD', *v. a.* *Dis* and card. To throw out of the hand such cards as are useless: hence to dismiss or eject from service or employment.

Their captains, if they list, *discard* whom they please, and send away such as will perhaps willingly be rid of that dangerous and hard service.

Spenser's State of Ireland.

These men being certainly jewels to a wise man, considering what wonders they were able to perform, yet were *discarded* by that unworthy prince, as not worthy the holding. *Sidney.*

And laughter where it reigns unchecked,
Discards and dissipates respect. *Shenstone.*

Should we own that we have a very imperfect idea of substance, would it not be hard to charge us with *discarding* substance out of the world?

Locke.

Justice *discards* party, friendship, kindred, and is always therefore represented as blind.

Addison's Guardian.

DISCAR'NATE, *adj.* *Dis* and *caro, carnis*, flesh; Ital. *scarnato.* Stripped of flesh.

'Tis better to own a judgment, though but with a curta supellex of coherent notions; than a memory, like a sepulchre, furnished with a load of broken and *discarnate* bones. *Glanville.*

To DISCASE', *v. a*, *Dis* and case. To strip; to undress.

Fetch me the hat and rapier in my cell:
I will *discase* me, and myself present.

Shakspeare. Tempest.

DISCERN', *v. a.* & *v. n.* } Fr. *discerner;* Sp. and Portug. *discernir;* Ital. and Lat. *discernere; dis* and *cernere;* Gr. κρινω; to judge or determine. To descry; discover; distinguish; judge: as a neuter verb to make distinction. Discerning is knowing; discreet; wise. The meaning of the other derivatives seems plain.
DISCERN'ER, *n. s.*
DISCERN'IBLE, *adj.*
DISCERN'IBLENESS,
DISCERN'IBLY,
DISCERN'ING, *part. adj.*
DISCERN'INGLY, *adv.*
DISCERN'MENT.

And behold among the simple ones, I *discerned* among the youths a young man void of understanding. *Prov.* vii. 7.

You shall be ruled and led
By some discretion, that *discerns* your state
Better than you yourself. *Shakspeare. King Lear.*

Does any here know me? This is not Lear:
Does Lear walk thus, speak thus? Where are his eyes?
Either his motion weakens, or his *discernings*
Are lethargied. *Id.*

'Twas said they saw but one; and no *discerner*
Durst wag his tongue in censure.

Id. Henry VIII.

They follow virtue for reward to-day;
To-morrow vice, if she give better pay:
We are so good, or bad, just at a price;
For nothing else *discerns* the virtue or vice.

Ben Jonson.

It *discerneth* of forces, frauds, crimes various of stellionate, and the inchoations towards crimes capital, not actually perpetrated. *Bacon.*

Consider what doctrines are infused *discernibly* amongst Christians, most apt to obstruct or interrupt the christian life. *Hammond.*

He was a great observer and *discerner* of men's natures and humours, and was very dexterous in compliance, where he found it useful. *Clarendon.*

All this is easily *discernible* by the ordinary discourses of the understanding. *South.*

To *discern* such buds as are fit to produce blossoms, from such as will display themselves but in leaves, is no difficult matter.. *Boyle.*

What doth better become wisdom than to *discern* what is worthy the loving? *Sidney.*

The custom of arguing on any side, even against our persuasions, dims the understanding, and makes it by degrees lose the faculty of *discerning* between truth and falsehood. *Locke.*

These two errours Ovid has most *discerningly* avoided. *Garth.*

It is indeed a sin of so gross, so formidable a bulk, that there needs no help of opticks to render it *discernible*, and therefore I need not farther expatiate on it. *Government of the Tongue.*

A reader that wants *discernment*, loves and admires the characters and actions of men in a wrong place. *Freeholder.*

Safe in his power, whose eyes *discern* afar
The secret ambush of a specious prayer;
Implore his aid, in his decisions rest,
Secure, whate'er he gives, he gives the best.
Johnson. Vanity of Human Wishes.

DISCERP', *v. a.* } Lat. *discerpo.* To
DISCERP'TIBLE, *adj.* } tear in pieces; to break; to destroy by separation of its parts.

What is most dense, and least porous, will be most coherent and least *discerptible*. *Glanville's Scepsis.*

Matter is moveable, this immoveable; matter *discerptible*, this indiscerptible. *More.*

DISCHARGE', *v. a.*, *v.*, *n.*, & *n. s.* } *Dis* and
DISCHARG'ER, *n. s.* } charge, or Fr. *descharger*. To disburden, throw off, deliver from a load, a debt, crime, or obligation; hence to perform duty, as well as to dismiss from office, or employ; to emit. As a neuter verb, to explode. As a substantive, discharge is emission, or explosion; matter emitted; disruption; dismission, or release, from duty or punishment. Performance of duty.

There is no *discharge* in that war, neither shall wickedness deliver those that are given to it. *Eccles.* viii. 8.

They wanted not reasons to be *discharged of* all blame, who are confessed to have no great fault, even by their very word and testimony, in whose eyes no fault of ours hath ever hitherto been esteemed to be small. *Hooker.*

Infected minds
To their deaf pillows will *discharge* their secrets.
Shakspeare. Macbeth.

If he had
The present money to *discharge* the Jew,
He would not take it. *Id. Merchant of Venice.*

Trial would also be made in herbs poisonous and purgative, whose ill quality perhaps may be *discharged*, or attempered, by setting stronger poisons or purgatives by them. *Bacon.*

The cloud, if it were oily or fatty, would not *discharge*. *Bacon's Natural History.*

The galleys also did oftentimes, out of their prows, *discharge* their great pieces against the city. *Knolles's History.*

A grateful mind
By owing owes not, but still pays; at once
Indebted and *discharged*. *Milton.*

He warns
Us, haply too secure of our *discharge*
From penalty, because from death released
Some days. *Id.*

To abate the bombilation of gunpowder, a way is promised by Porta, by borax and butter, which he says will make it so go off, as scarcely to be heard by the *discharger*. *Browne.*

They are imprudent enough to *discharge* themselves *of* this blunder, by laying the contradiction at Virgil's door. *Dryden.*

Had I a hundred tongues, a wit so large
As could their hundred offices *discharge*.
Dryden's Fables.

The text expresses the sound estate of the conscience, not barely by its not accusing, but by its not condemning us; which word imports properly an acquittance or *discharge* of a man upon some precedent accusation, and a full trial and cognizance of his cause. *South.*

If one man's fault could discharge another man of his duty, there would be no place left for the common offices of society. *L'Estrange.*

When foreign trade imports more than our commodities will pay for, we contract debts beyond sea; and those are paid with money, when they will not take our goods to *discharge* them. *Locke.*

As the heat of all springs is owing to subterraneous fire, so wherever there are any extraordinary *discharges* of this fire, there also are the neighbouring springs hotter than ordinary. *Woodward.*

The man who builds, and wants wherewith to pay,
Provides a house from which to run away.
In Britain what is many a lordly seat
But a *discharge* in full for an estate? *Young.*

We *discharged* a pistol, and had the sound returned upon us fifty-six times, though the air was foggy. *Addison on Italy.*

Soon may kind heaven a sure relief provide;
Soon may your sire *discharge* the vengeance due,
And all your wrongs the proud oppressors rue.
Pope's Odyssey.

The matter being suppurated, I opened an inflamed tubercle in the great angle of the left eye, and *discharged* a well concocted matter. *Wiseman's Surgery.*

The hæmorrhage being stopped, the next occurrence is a thin serous *discharge*. *Sharp's Surgery.*

DISCINCT', *adj.* Lat. *discinctus.* Ungirded; loosely dressed.

DISCIND', *v. a.* Lat. *discindo.* To divide; to cut in pieces.

We found several concretions so soft, that we could easily *discind* them betwixt our fingers. *Boyle.*

DISCI'PLE, *v. a.* & *n. s.* } Fr. *disciple*;
DISCI'PLESHIP. } Span. and Port. *discipulo*; Lat. *discipulus*, from *disciplina*. One who submits himself to discipline as a scholar. See DISCIPLINE. Discipleship is the state of being a disciple.

So that the *disciplis* weren named at Antioche cristen men. *Wiclif. Dedis.* 11.

She, bitter penance! with an iron whip
Was wont him to *disciple* every day. *Spenser.*

He did look far
Into the service of the time, and was
Discipled of the bravest. *Shakspeare.*

That to which justification is promised, is the giving up of the whole soul intirely unto Christ, undertaking *discipleship* upon Christ's terms. *Hammond's Pract. Catech.*

He rebuked *disciples* who would call for fire from heaven upon whole cities, for the neglect of a few. *King Charles.*

A young *disciple* should behave himself so well, as to gain the affection and the ear of his instructor *Watts.*

For, as Christians, we are the *disciples*, the followers, and the servants of Christ, redeemed by him. *Mason.*

Yea, a *disciple*, that would make the Founder
Of your belief renounce it, could he see
Such proselytes. *Byron.*

Disciple, in a more restrained sense, is the designation applied to those who were the immediate followers and attendants on Christ's person, of whom there were seventy or seventy-one. The terms disciple and apostle are often used synonymously in the gospel history; but sometimes the apostles are distinguished from disciples, as persons selected out of the number of disciples, to be the principal ministers of his religion: of these there were only twelve. The Latins kept the festival of the seventy or seventy-two disciples on July 15th, and the Greeks on January 4th.

DIS'CIPLINE, *v. a.* & *n. s.* } Fr. *discipline*; Lat. Span. Port. and It. *disciplina*, from *disco*, to learn, because discipline is necessary to teaching. To educate, instruct, with power to punish; to advance by instruction. As a substantive discipline is, instruction; rule; any thing taught; system of government; mortification; punishment. Disciplinable is, docile; capable of discipline. Disciplinarian, relating to, and as a substantive one zealous for, discipline. Disciplinary, pertaining to discipline.

Dis'ciplinable, *adj.*
Dis'ciplinableness, *n. s.*
Disciplina'rian, *n. s.* & *adj.*
Dis'ciplinary.

If ony vertue, if ony preisyng of *discipline*, thenke ghe these thingis, that also ghe han lerned. *Wiclif. Filipensis* 4.

He had charge my *discipline* to frame,
And tutors nouriture to oversee. *Spenser.*

As we are to believe for ever the articles of evangelical doctrine, so the precepts of *discipline*, we are, in like sort, bound for ever to observe. *Hooker.*

The cold of the northern parts is that which, without aid of *discipline*, doth make the bodies hardest, and the courage warmest. *Bacon.*

This opens all your victories in Scotland,
Your *discipline* in war, wisdom in peace. *Shakspeare.*

The law appeared imperfect, and but given
With purpose to resign them in full time
Up to a better covenant, *disciplined*
From shadowy types to truth, from flesh to spirit. *Milton.*

These are the studies wherein our noble and gentle youth ought to bestow their time in a *disciplinary* way. *Id.*

The love of God makes a man chaste without the laborious arts of fasting and exterior *discipline*; he reaches at glory without any other arms but those of love. *Taylor.*

Art may be said to overcome and advance nature in these mechanical *disciplines*, which, in this respect, are much to be preferred. *Wilkins.*

We find in animals, especially some of them, as horses, dogs, apes, horses, and elephants, not only perception, phantasy, and memory, common to most, if not all animals, but something of sagacity, providence, and *disciplinableness*. *Hale.*

Let crooked steel invade
The troops which *discipline* disclaim,
Luxurious growth with rigour tame. *Dryden.*

What eagerness in *disciplinarian* uncertainties, when the love of God and our neighbour, evangelical unquestionables, are neglected! *Glan. Scepsis.*

The most perfect, who have their passions in the best *discipline*, are yet obliged to be constantly on their guard. *Rogers.*

They look to us, as we should judge of an army of well-*disciplined* soldiers at a distance.
Derham's Astro-Theology.

They were with care prepared and *disciplined* for confirmation, which they could not arrive at till they were found, upon examination, to have made a sufficient progress in the knowledge of Christianity.
Addison on the Christian Religion.

They draw those that dissent into dislike with the state, as puritans, or *disciplinarians*.
Sanders. Pax Eccl.

Those canons in behalf of marriage were only *disciplinary*, grounded on prudential motives.
Bp. Ferne.

It is by the assistance of the eye, and the ear especially, which are called the senses of *discipline*, that our minds are furnished with various parts of knowledge. *Watts.*

The passions may be humoured till they become our master, as a horse may be pampered till he gets the better of his rider; but early *discipline* will prevent mutiny, and keep the helm in the hands of reason. *Cumberland.*

In colleges and halls in ancient days,
When learning, virtue, piety, and truth,
Were precious and inculcated with care,
There dwelt a sage called *Discipline*. *Cowper.*

Discipline, Ecclesiastical, consists in putting those laws in execution by which the church is governed, and inflicting the penalties enjoined by them against the several sorts of offenders. The primitive church never pretended to exercise discipline upon any but such as were within her pale in the largest sense, by some act of their own profession: and even upon these she never pretended to exercise her discipline so far as to cancel or disannul their baptism: all that she pretended to was, to deprive men of the benefits of external communion, such as public prayer, receiving the eucharist, and other acts of divine worship. The church discipline was confined to the admonition of the party, and to the lesser and greater excommunication. As to the objects of ecclesiastical discipline, they were all such delinquents as fell into great and scandalous crimes after baptism. Discipline, in a more peculiar sense, is used for the bodily punishments inflicted on a religious of the Romish church who has been found a delinquent; or even for that which the religious voluntarily undergo or inflict on themselves, by way of mortification.

Discipline, the Book of, in the history of the church of Scotland, is a common Order, drawn up by the assembly of ministers in 1650, for the reformation and uniformity to be observed in the discipline and policy of the church. In this book the government of the church by prelates is set aside, kirk sessions are established, the observation of fast days and saints' days is condemned, and other regulations for the government of the church are determined. This book was approved by the privy council, and is called the First Book of Discipline.

DISCLAIM', *v. a.* } *Dis* and claim. To
DISCLAI'MER, *n. s.* } disown; to deny any knowledge of; to retract any union with; to abrogate: a disclaimer is both one that disclaims, disowns, or renounces, and a legal or other plea containing an express denial or refusal.

You cowardly rascal! nature *disclaims* all share in thee: a taylor made thee. *Shakspeare. King Lear.*

He calls the gods to witness their offence;
Disclaims the war, asserts his innocence.
Dryden's Æneid.

We find our Lord, on all occasions, *disclaiming* all pretensions to a temporal kingdom. *Rogers.*

Very few, among those who profess themselves Christians, *disclaim* all concern for their souls, disown the authority, or renounce the expectations, of the gospel. *Id.*

DISC'LOSE, *v. a.* } Lat. *discludo*, *dis* and
DISC'LOSER, *n. s.* } close. To uncover; to
DISC'LOSURE, } produce to open view.
DISC'LUSIONS, *n. s.* } Disclusion is emission.

There may be a reconciliation, except for upbraiding, or pride, or *disclosing* of secrets, or a treacherous wound; for from these things every friend will depart. *Ecclus.*

The producing of cold is a thing very worthy the inquisition, both for the use and *disclosure* of causes. *Bacon.*

He that proportioned wonders can *disclose*,
At once his fancy and his judgment shows. *Waller.*

Judge what a ridiculous thing it were, that the continued shadow of the earth should be broken by sudden miraculous eruptions and *disclusions* of light, to prevent the art of the lanthorn-maker. *More.*

Then earth and ocean various forms *disclose*.
Dryden.

If I *disclose* my passion,
Our friendship's at an end; If I conceal it,
The world will call me false. *Addison's Cato.*

Ten brother-youths with light umbrellas shade,
Or fan with busy hands the panting maid;
Loose wave her locks, *disclosing*, as they break,
The rising bosom and averted cheek. *Darwin.*

ANGIOLINA. Ah! why
Do you still keep apart, and walk alone,
And let such strong emotions stamp your brow,
As not betraying their full import, yet
Disclose too much?

DOGE. *Disclose* too much?—of what?
What is there to *disclose*. *Byron.*

DISCOL'OUR, *v. a.* } Lat. *decoloro*. To
DISCOL'OURATION, *n. s.* } change from the natural hue; to stain. The change produced, or art of changing, is discoloration.

All in a kirtle of *discoloured* say
He clothed was, ypaynted full of eies.
Spenser. Faerie Queene.

Many a widow's husband grovelling lies,
Coldly embracing the *discoloured* earth.
Shakspeare. King John.

Drink water, either pure, or but *discoloured* with malt. *Temple.*

Suspicions, and fantastical surmise,
And jealousy, with jaundice in her eyes,
Discolouring all she viewed. *Dryden.*

Have a care lest some beloved notion, or some darling science, so prevail over your mind as to *discolour* all your ideas. *Watts.*

In a depravation of the humours from a sound state to what the physicians call by a general name of a cacochymy, spots and *discolorations* of the skin are signs of weak fibres. *Arbuthnot.*

DISCOM'FIT, *v. a.* & *n. s.* } Fr. *desconfire*;
DISCOM'FITURE, *n. s.* } Ital. *sconfiggere*, from Lat. *disconfigere*. To defeat; to conquer; overpower; subdue.

Joshua *discomfi'ed* Amalek and his people with the edge of the sword. *Exodus.*

The pillowes dide hir besinesse and cure,
After the bataille and *discomfiture*.
Chaucer. Cant. Tales.

For in this world there ne is no creture
Walking, alas! in more *discomfiture*
Than I, ne that more sorrowe doth endure.
Donne.

Fight against that monstrous rebel, Cade,
Whom, since, I heard to be *discomfited*.
Shakspeare.

Fly you must: incurable *discomfit*
Reigns in the hearts of all our present party. *Id.*

Dagon must stoop, and shall ere long receive
Such a *discomfit*, as shall quite despoil him
Of all these boasted trophies. *Milton's Agonistes.*

While my gallant countrymen are employed in pursuing rebels half *discomfited* through the consciousness of their guilt, I shall improve those victories to the good of my fellow subjects. *Addison.*

DISCOM'FORT, *v. a.* & *n. s.* } *Dis* and com-
DISCOM'FORTABLE, *adj.* } fort. To grieve; sadden; deject: as a substantive, uneasiness; sorrow; melancholy.

Therefore whanne ye seen the abomynacioun of *discoumfort*, that is seid of Danyel the profete stondynge in the hooly place, he that redith undirstonde he. *Wiclif. Matt.* 24.

This himself did foresee, and therefore armed his church, to the end they might sustain it without *discomfort*. *Hooker.*

Discomfort guides my tongue,
And bids me speak of nothing but despair.
Shakspeare.

Discomfortable cousin, knowest thou not
That when the searching eye of Heaven is hid
Behind the globe, it lights the lower world? *Id.*

It is no *discomfort* for a man to flee, when his conscience pursues him not.
Bp. Hall. Contemplations.

What! did that help poor Dorus, whose eyes could carry unto him no other news but *discomfortable*?
Sidney.

In solitude there is not only *discomfort*, but weakness also. *South.*

DISCOMMEND', *v. a.* } *Dis* and com-
DISCOMMEN'DABLE, *adj.* } mend. To
DISCOMMEN'DABLENESS, *n. s.* } blame; to cen-
DISCOMMENDA'TION, *n. s.* } sure: discom-
DISCOMMEN'DER. } mendable is blameable, deserving censure: discommendation, censure: discommender, he who expresses or bestows it.

Absolutely we cannot *discommend*, we cannot absolutely approve, either willingness to live, or forwardness to die. *Hooker.*

Now you will all be wits: and he, I pray,
And you, that *discommend* it, mend the play.
Denham.

Neither do I *discommend* the lofty style in tragedy, which is naturally pompous and magnificent.
Dryden.

Pusillanimity is, according to Aristotle's morality, a vice very *discommendable*. *Ayliffe's Parergon.*

Tully assigns three motions, whereby, without any *discommendation*, a man might be drawn to become an accuser of others. *Id.*

DISCOMMODE', *v. a.* } Fr. *dis* and *com-*
DISCOMMOD'IOUS, *adj.* } *mode*. To put to
DISCOMMO'DITY, *n. s.* } inconvenience; to molest; to incommode. The adjective and substantive follow this meaning.

So many thousand soldiers, unfit for any labour, or other trade, must either seek service and employment abroad, which may be dangerous; or else employ themselves here at home, which may be *discommodious*.
Spenser's State of Ireland.

We speak now of usury, how the *discommodities* of it may be best avoided, and the commodities retained: or how, in the balance of commodities and *discommodities*, the qualities of usury are to be reconciled.
Bacon.

It is better that a ship should be preserved with some *discommodity* to the sailors, than that, the sailors being in health, the ship should perish. *Hayward.*

DISCOMPOSE', *v. a.* } Fr. *décomposer*.
DISCOMPO'SURE, *n. s.* } To disorder; to unsettle: hence to offend; vex; irritate. Discomposure is the effect thus produced.

Though he was a dark prince, and infinitely suspicious, he never put down or *discomposed* a counsellor or near servant. *Bacon.*

He threw himself upon his bed, lamenting with much passion, and with abundance of tears; and continued in this melancholick *discomposure* of mind many days. *Clarendon.*

No more, dear mother: ill in death it shows,
Your peace of mind by rage to *discompose*. *Dryden.*

Men who possess all the advantages of life, are in a state where there are many accidents to disorder and *discompose*, but few to please them. *Swift.*

DISCONCERT', *v. a.* *Dis* and concert. To unsettle; discompose; disturb a scheme.

You need not provoke their spirits by outrages: a careless gesture, a word, or a look, is enough to *disconcert* them. *Collier.*

DISCONFOR'MITY, *n. s.* *Dis* and conformity. Want of agreement; inconsistency.

Lyes arise from errour and mistake, or malice and forgery; they consist in the disagreement and *disconformity* betwixt the speech and the conception of the mind, or the conceptions of the mind and the things themselves, or the speech and the things.
Hakewill on Providence.

DISCONGRU'ITY, *n. s.* *Dis* and congruity. Disagreement; inconsistency.

There is want of capacity in the thing, to sustain such a duration, from the intrinsical *discongruity* of the one to the other.
Hale's Origin of Mankind.

DISCON'SOLATE, *adj.* } *Dis* and console.
DISCON'SOLATELY, *adv.* } Void of comfort;
DISCON'SOLATENESS, *n. s.* } hopeless; sorrowful; melancholy.

See Cassius all *disconsolate*,
With Pindarus his bondman on this hill.
Shakspeare.

In his [God's] absence, there is nothing but dolour, *disconsolateness*, and despair. *Bp. Hall.*

If patiently thy bidding they obey,
Dismiss them not *disconsolate*. *Milton.*

The ladies and the knights, no shelter nigh,
Were dropping wet, *disconsolate* and wan,
And through their thin array received the rain.
Dryden.

The moon reflects the sunbeams to us, and so, by illuminating the air, takes away in some measure the *disconsolate* darkness of our winter nights. *Ray.*

I am first affrighted and confounded with that forlorn solitude in which I am placed by my philosophy, and fancy myself some strange uncouth monster, who, not being able to unite and mingle in society, has been expelled all human commerce, and left utterly abandoned and *disconsolate*.
Hume. On the Human Understanding.

DISCONTENT', *n. s.* & *adj.* } *Dis* and Con-
DISCONTENT'ED, *part. adj.* } TENT, which
DISCONTENT'EDLY, *adv.* } see. Uneasi-
DISCONTENT'EDNESS, *n. s.* } ness; dissatis-
DISCONTENT'MENT. } faction with one's present state. Discontentment is an old word, expressing the same meaning.

These are the vices that fill them with general *discontentment*, as though the bosom of that famous church, wherein they live, were more noisome than any dungeon. *Hooker.*

I see your brows full of *discontent*,
Your hearts of sorrows, and your eyes of tears.
Shakspeare.

The politick and artificial nourishing and entertaining of hopes, and carrying men from hopes to hopes, is one of the best antidotes against the poison of *discontentment*. *Bacon.*

The misery which is supposed to follow poverty, arises, not from want, but from peevishness and *discontent*. *Burton.*

Pride is ever *discontented*, and still seeks matter of boasting in her own works.
Bp. Hall. Contemplations.

The rest were seized with sullen *discontent*,
And a deaf murmur through the squadrons went.
Dryden.

These are, beyond comparison, the two greatest evils in this world; a diseased body, and a *discontented* mind. *Tillotson.*

A beautiful bust of Alexander the Great casts up his face to heaven with a noble air of grief, or *discontentedness*, in his looks. *Addison's Travels.*

As a man inebriated only by vapours, soon recovers in the open air; a nation *discontented* to madness, without any adequate cause, will return to its wits and allegiance, when a little pause has cooled it to reflection. *Johnson.*

DISCONTIN'UE, *v. a.* & *v. n.* } Fr. *dis-*
DISCONTINU'ITY, *n. s.* } *continuer*.
To leave off; to cease; break off; interrupt: as a neuter verb, to lose cohesion, or any established right.

Thyself shall *discontinue* from thine heritage that I give thee, and I will cause thee to serve thine enemies. *Jer.*

Twenty puny lies I'll tell,
That men shall swear I have *discontinued* school
Above a twelvemonth. *Shakspeare.*

Examine thy customs of diet, sleep, exercise, apparel, and the like; and try, in any thou shalt judge hurtful, to *discontinue* it by little and little; but so, as if thou find any inconvenience by the change, thou come back to it again. *Bacon.*

There is that property, in all letters, of aptness to be conjoined in syllables and words, through the voluble motions of the organs from one stop or figure to another, that they modify and discriminate the voice, without appearing to *discontinue* it.
Holder's Elements of Speech.

Let us consider whether our approaches to him are sweet and refreshing, and if we are uneasy under any long *discontinuance* of our conversation with him. *Atterbury.*

Upon any *discontinuation* of parts, made either by bubbles, or by shaking the glass, the whole mercury falls. *Newton.*

That *discontinuity* of parts is the principal cause of the opacity of bodies, will appear by considering that opaque substances become transparent by filling their pores with any substance of equal, or almost equal, density with their parts. *Id.*

The effect of *discontinuance* of possession is, that a man may not enter upon his own land or tenement alienated, whatsoever his right be unto it, or by his own authority; but must seek to recover possession by law. The effect of *discontinuance* of plea is, that the instance may not be taken up again, but by a new writ to begin the suit afresh. *Cowell.*

DISCONVE'NIENCE, *n. s.* *Dis* and convenience. Incongruity; disagreement; opposition.

Fear ariseth many times out of natural antipathies of nature; but, in these *disconveniencies* of nature, deliberation hath no place at all. *Bramhall's Answer to Hobbes.*

DIS'CORD, *v. n.* & *n. s.* } Fr. *discord*; Sp. Ital. and Lat. *discordia*; from *dis* and *cors*, *cordis*, the heart; an adverse heart. To disagree; not to accord with. As a substantive, disagreement; opposition; jangling; contrariety of, or ill agreement between, sounds. Discordance and discordancy both seem synonymous with discord.

DISCOR'DANCE, *n. s.*
DISCOR'DANCY,
DISCOR'DANT, *adj.*
DISCOR'DANTLY, *adv.*

These things doth the Lord hate, the false witness hat speaketh lies, and he that soweth *discord* among brethren. *Proverbs.*

See what a scourge is laid upon your hate,
That heaven finds means to kill your joys with love!
And I, for winking at your *discords* too,
Have lost a brace of kinsmen.
Shakspeare. Romeo and Juliet.

It is sound alone that doth immediately and incorporeally affect most; this is most manifest in music, and concords and *discords* in music: for all sounds, whether they be sharp or flat, if they be sweet, have a roundness and equality; and if they be harsh, are unequal: for a *discord* itself is but a harshness of divers sounds meeting. *Bacon.*

This is the slowest, yet the daintiest sense;
For even the ears of such as have no skill
Perceive a *discord*, and conceive offence;
And knowing not what's good, yet find the ill.
Davies.

How doth music amaze us, when of *discords* she maketh the sweetest harmony! *Peacham.*

Hither conscience is to be referred; if by a comparison of things done with the rule there be a consonancy, then follows the sentence of approbation; if *discordant* from it, the sentence of condemnation. *Hale's Origin of Mankind.*

Two strings of a musical instrument being struck together, making two noises that arrive at the ear at the same time as to sense, yield a sound differing from either of them, and as it were compounded of both; insomuch, that if they be *discordantly* tuned, though each of them struck apart would yield a pleasing sound, yet being struck together they make a harsh and troublesome noise. *Boyle on Colours.*

Discord, like that of music's various parts,
Discord that makes the harmony of hearts;
Discord that only this dispute shall bring,
Who best shall love the duke and serve the king.
Dryden.

All nature is but art unknown to thee;
All chance, direction which thou canst not see;
All *discord*, harmony not understood;
All partial evil, universal good. *Pope.*

DISCORD, in music, every sound which, joined with another, forms an assemblage disagreeable to the ear; or, rather, every interval whose extremes do not coalesce. Now, as there are no other concords, or consonances, except those which form amongst themselves, and with their fundamental sound, perfect chords, it follows that every other interval must be a real dissonance or discord: even the third and sixth were reckoned such among the ancients, who excluded them from the number of consonant chords. The term dissonance, which is synonymous with discord both in a literal and metaphorical sense, signifies disagreement or disunion. In reality, that which renders dissonances grating is, that the sounds which form them, far from uniting in the ear, seem to repel each other, and are heard each by itself as two distinct sounds though produced at the same time. This repulsion or violent oscillation of sounds is heard more or less as the vibrations which produce it are more or less frequently coincident. When two vocal strings are gradually tuned, till they approach a consonant interval, the pulsations become slower as the chord grows more just, till at last they are scarcely heard, if heard at all; whence it appears certain that the pleasure, produced in us by harmony, results from the more or less exact and frequent coincidence of vibrations; though the reason why this coincidence should give pleasure, more than any other modification or combination of sounds, appears to us inscrutable. The agreeable effects of dissonance, in harmony, are no objection to this theory: since it is allowed that the sensations excited by discord are not in themselves immediately and necessarily pleasing, but only please by auricular deception. The ear is surprised with the shock it receives; and, in proportion as it is harsh and grating, we feel the pleasure of returning harmony enhanced, and the disappointment of being artfully and insensibly extricated more agreeable. The name of dissonance is given sometimes to the interval, and sometimes to each of the sounds which form it. But, though two sounds equally form a dissonance between themselves, the name is most frequently given to that sound in particular which is most extraneous to the chord. The number of possible dissonances is indefinite; but as in music we exclude all intervals which are not found in the system received, the number of dissonances is reduced to a very few: besides, in practice, we can only select from those few such as are agreeable to the species, and the mode, in which we compose; and from this last number we must exclude such as cannot be used consistently with the rules prescribed. But what are these rules? Have they any foundation in nature

or are they merely arbitrary? This is what Rousseau has endeavoured to investigate and to deduce, with more ingenuity than success, from principles purely mechanical.

DISCOV'ER, *v. a.* DISCOV'ERABLE, *adj.* DISCOV'ERER, *n. s.* DISCOV'ERY. } Fr. *découvrir; dis* and cover. To see or explore; to show; disclose; bring to light; make plain or visible.

He *discovereth* deep things out of darkness, and bringeth out to light the shadow of death. *Job* xii. 22.

When we had *discovered* Cyprus, we left it on the left hand. *Acts.*

Let that man with better sense advise,
That of the world least part to us is read;
And daily how through hardy enterprize
Many great regions are *discovered*.
Spenser. Faerie Queene.

The utter waulls of it yet stond. The kepe is exceding fair and strong; and in the waulles be certein strong towers. The lodgings that were within the area of the castelle be *discovered* and faul to ruine. *Leland.*

Here stand my lords, and send *discoverers* forth,
To know the numbers of our enemies. *Shakspeare.*

What, must I hold a candle to my shame?
They in themselves, good sooth, are too, too light.
Why 'tis an office of *discovery*, love,
And I should be obscured. *Id. Merchant of Venice.*

Some high climbing hill,
Which to his eye *discovers* unaware
The goodly prospect of some foreign land,
First seen, or some renowned metropolis
With glistering spires and battlements adorned.
Milton.

Man with strength and free will armed
Complete, to have *discovered* and repulsed
Whatever wiles of foe or seeming friend. *Id.*

They were deceived by Satan, and that not in an invisible situation, but in an open and *discoverable* apparition, that is, in the form of a serpent. *Browne's Vulgar Errours.*

If more be found out, they will not recompense the *discoverer's* pains, but will be fitter to be cast out. *Holder.*

The cover of the coach was made with such joints, that as they might, to avoid the weather, pull it up close, so they might put each end down, and remain as *discovered* and open-sighted as on horseback. *Sidney.*

Of all who since have used the open sea,
Than the bold English none more fame have won;
Beyond the year, and out of heaven's high way,
They make *discoveries* where they see no sun.
Dryden.

Things that appeared amiable by the light of this world, appear of a different odious hue in the clear *discoveries* of the next. *South.*

An old maiden gentlewoman is the greatest *discoverer* of judgments; she can tell you what sin it was that set such a man's house on fire. *Addison's Spectator.*

It is concluded by astronomers, that the atmosphere of the moon hath no clouds nor rains, but a perpetual and uniform serenity; because nothing *discoverable* in the lunar surface is ever covered and absconded by the interposition of any clouds or mists. *Bentley.*

Places receive appellations, according to the language of the *discoverer*, from observations made upon the people. *Broome.*

Revelation may assert two things to be joined, whose connection or agreement is not *discoverable* by reason. *Watts.*

DISCOUN'SEL, *v. a.* *Dis* and counsel. To dissuade; to give contrary advice. Obsolete.

But him that palmer from that vanity
With temperate advice *discounselled*. *Spenser.*

DIS'COUNT, *v. a.* & *n. s.* From *dis* and count. To count back; to pay back again. Interest so counted after a principal given.

My father's, mother's, brother's death I pardon:
My prayers and penance shall *discount* for these,
And beg of heaven to charge the bill on me.
Dryden.

The farmers, spitefully combined,
Force him to take his tithes in kind;
And Parvisol *discounts* arrears
By bills for taxes and repairs. *Swift.*

His whole intention was, to buy a certain quantity of copper money from Wood, at a large *discount*, and sell them as well as he could. *Id.*

DISCOUNT, in commerce, a term among traders, merchants, and bankers. It is used by the two former on occasion of their buying commodities on the usual time of credit, with a condition that the seller shall allow the buyer a certain discount, at the rate of so much per cent. per annum, for the time for which the credit is generally given, upon condition that the buyer pays ready money for such commodities, instead of taking the time of credit. Traders and merchants also frequently taking promissory notes for moneys due, payable to them or order at a certain time, and sometimes having occasion for money before the time is elapsed, procure these notes to be discounted by bankers before the time of payment. Bills of exchange are also discounted by bankers; and in this consists one article of the profits of banking. See BANK.

DISCOUN'TENANCE, *v. a.* & *n. s.* DISCOUN'TENANCER, *n. s.* } From *dis* and countenance. To discourage by cold treatment: one who discourages.

Rumours of scandal and murmurs against the king and his government, taxed him for a great taxer of his people, and *discountenancer* of his nobility. *Bacon.*

He thought a little *discountenance* upon those persons would suppress that spirit. *Clarendon.*

He came, and with him Eve, more loth, tho' first
To offend; *discountenanced* both, and discomposed.
Milton.

The truly upright judge will always countenance right, and *discountenance* wrong. *Atterbury.*

In expectation of the hour of judgment, he patiently bears all the difficulties of duty, and the *discountenance* he meets with from a wicked and profane world. *Rogers.*

Present time and future may be considered as rivals; and he who solicits the one, must expect to be *discountenanced* by the other. *Sir Joshua Reynolds.*

DISCOUR'AGE, *v. a.* DISCOUR'AGER, *n. s.* DISCOUR'AGEMENT. } Fr. *décourager. Dis* and courage. To depress; deprive of confidence; dastardise; deter; taking *from*: discouragement is the cause of depression, or fear.

Wherefore *discourage* ye the heart of the children of Israel *from* going over into the land? *Numbers.*

I might neither encourage the rebels' insolence, nor *discourage* the protestants' loyalty and patience. *King Charles.*

You may keep your beauty and your health, unless you destroy them yourself, or *discourage* them *to* stay with you, by using them ill. *Temple.*

To things we would have them learn, the great and only *discouragement* is, that they are called to them. *Locke.*

The apostle with great zeal *discourages* too unreasonable a presumption. *Rogers.*

The books read at schools and colleges are full of incitements to virtue, and *discouragement from* vice. *Swift.*

Most men in years, as they are generally *discouragers* of youth, are like old trees, which, being past bearing themselves, will suffer no young plants to flourish beneath them. *Pope.*

The obscurity of the prophecies, great as it is in some parts, is not such as should *discourage* the Christian Laic from the study of them, nor such as will excuse him under the neglect of it. *Bp. Horsley.*

DISCOURSE′, *v. a., v. n.* & *n. s.* } Span. and Fr. *discourir*; It. *discorrere*; Lat. *discurrere*, *dis* and *curro*, to wander about; because in discourse the mind travels from object to object. To treat of by speech or writing; to discuss: as a neuter verb, to talk; relate; converse; reason.

DISCOURSER′, *n. s.* [*n. s.*

DISCOURS′IVE, *adj.*

By reason of that original weakness in the instruments, without which the understanding part is not able in this world by *discourse* to work, the very conceit of painfulness is a bridle to stay us. *Hooker.*

Sure he that made us with such large *discourse*,
Looking before and after, gave us not
That capability and godlike reason
To rust in us unused. *Shakspeare.*

Go with us into the abbey here,
And let us there at large *discourse* all our fortunes. *Id.*

The tract of every thing
Would by a good *discourser* lose some life,
Which action's self was tongue to. *Id.*

He waxeth wiser than himself, more by an hour's *discourse*, than by a day's meditation. *Bacon.*

Brutes do want that quick *discoursing* power. *Davies.*

In thy *discourse*, if thou desire to please,
All such is courteous, useful, new, or witty;
Usefulness comes by labour, wit by ease,
Courtesy grows in court, news in the city. *Herbert.*

The soul
Reason receives, and reason is her being,
Discursive, or intuitive; *discourse*
Is oftest yours, the latter is most ours. *Milton.*

Philologers and critical *discoursers*, who look beyond the obvious exteriors of things, will not be angry at our narrower explorations. *Browne.*

The act of the mind which connects propositions, and deduceth conclusions from them, the schools call *discourse*; and we shall not miscall it, if we name it reason. *Glanville.*

Of various things *discoursing* as he passed,
Anchises hither bends. *Dryden.*

The *discourse* here is about ideas, which, he says, are real things, and seen in God. *Locke.*

The general maxims we are *discoursing* of are not known to children, ideots, and a great part of mankind. *Id.*

Flowers of rhetoric in sermons and serious *discourses* are like the blue and red flowers in corn, pleasing to those who come only for amusement, but prejudicial to him who would reap profit from it. *Pope.*

When a man's capacity does not enable him to entertain or animate the company, it is the best he can do to render himself inoffensive, and to keep his teeth clean; but the person who has talents for *discourse*, and a passionate desire to enliven conversation, ought to have many improprieties excused, which in the other were unpardonable. *Shenstone.*

DISCOUR′TEOUS, *adj.* *Dis* and courteous. Uncivil; uncomplaisant; defective in good manners.

DISCOUR′TESY, *n. s.* } *Dis* and courtesy.
DISCOUR′TEOUS, *adj.* } Incivility; rudeness; act of disrespect.

Be calm in arguing; for fierceness makes
Error a fault, and truth *discourtesy*. *Herbert.*

As if chearfulness had been tediousness, and good entertainment had been turned to *discourtesy*, he would ever get himself alone. *Sidney.*

He made me visits, maundering as if I had done him a *discourtesy*. *Wiseman.*

He resolved to unhorse the first *discourteous* knight he should meet. *Motteux's Don Quixote.*

DIS′COUS, *adj.* From Lat. *discus*. Broad; flat; wide. Used by botanists to denote the middle, plain, and flat part of some flowers, such as the flos solis, &c.

DISCRED′IT, *v. a.* & *n. s.* Fr. *décréditer*. To deprive of credibility; to make not trusted; to disgrace; distrust: as a substantive, reproach; disgrace; lower degree of infamy; imputation of fault; ignominy.

He, like a privileged spy, whom nothing can
Discredit, libels now 'gainst each great man. *Donne.*

You had left unseen a wonderful piece of work, which not to have been blest withal, would have *discredited* you. *Shakspeare.*

Had I been the finder out of this secret, it would not have relished among my other *discredits*. *Shakspeare.*

Idlers will ever live like rogues, and not fall to work, but be lazy, and then certify over their country to the *discredit* of a plantation. *Bacon.*

He is commended that makes a saving voyage, and least *discredits* his travels, who returns the same man he went. *Wotton.*

'Tis the duty of every Christian to be concerned for the reputation or *discredit* his life may bring on his profession. *Rogers.*

Alas, the small *discredit* of a bribe
Scarce hurts the lawyer, but undoes the scribe. *Pope.*

Reflect how glorious it would be to appear in countenance of *discredited* duty, and by example of piety revive the declining spirit of religion. *Id.*

DISCREET′, *adj.* } Fr. *discret*; Span. Port. and Ital. *discreto*; Lat. *discretus*, from *discerno*, to judge.
DISCREET′LY, *adv* }
DISCREET′NESS, *n. s.* }
DISCRE′TION, }
DISCRE′TIONARY, *adj.* } Prudent; wary; cautious; sober; modest. Discretion and discreetness are synonymous substantives. Discretionary means unlimited, except by discretion.

But now parfourme ghe in dede, that as the *discrecioun* of wille is redi so be it also of parfourmyng of that that ghe han. *Wiclif.* ii *Cor.* 8.

The greatest parts without *discretion*, as observed by an elegant writer, may be fatal to their owner. *Hume.*

Honest, *discreet*, quiet, and godly learned men, will not be withdrawn by you. *Whitgifte.*

Nothing then was further thought upon for the manner of governing; but all permitted unto their wisdom and *discretion* which were to rule. *Hooker.*

Less fearful than *discreet*,
You love the fundamental part of state,
More than you doubt the charge of 't. *Shakspeare.*

It is not good that children should know any wickedness: old folks have *discretion*, and know the world. *Id.*

Discretion is the victor of the war,
With lenity, and our directions followed
With cheerfulness, a prosperous end must crown
Our works well undertaken. *Massinger.*

Poets lose half the praise they should have got,
Could it be known what they *discreetly* blot. *Waller.*

The labour of obedience, loyalty, and subjection, is no more but for a man honestly and *discreetly* to sit still. *South.*

The major being a person of consummate experience, was invested with a *discretionary* power. *Tatler.*

It is the *discreet* man, not the witty, nor the learned, nor the brave, who guides the conversation, and gives measures to society. *Addison's Spectator.*

There is no talent so useful towards rising in the world, or which puts men more out of the reach of fortune, than *discretion*, a species of lower prudence. *Swift.*

The dullest brain, if gently stirred,
Perhaps may waken to a humming bird;
The most recluse, *discreetly* opened, find
Congenial object in the cockle kind. *Pope's Dunciad.*

A deacon may have a dispensation for entering into orders before he is twenty-three years of age; and it is *discretionary* in the bishop to admit him to that order at what time he thinks fit. *Ayliffe's Parergon.*

Dear youth, by fortune favored, but by love,
Alas! not favoured less, be still as now
Discreet. *Thomson.*

To Jeffrey go, be silent and *discreet*,
His pay is just ten sterling pounds per sheet:
Fear not to lie, 'twill seem a lucky hit,
Shrink not from blasphemy, 'twill pass for wit. *Byron.*

DISCREP'ANCE, *n. s.* } Lat. *discrepantia.*
DISCREP'ANT, *adj.* } Difference; contrariety; disagreement.

Diversity of education, and *discrepancy* of those principles wherewith men are at first imbued, and wherein all our after reasonings are founded. *Lord Digby to K. Digby.*

DISCRE'TE, *v. a.* & *adj.* } Lat. *discretus.*
DISCRE'TIVE, *adj* } To separate; to discontinue; distinct; disjoined. For discretive, see the instance.

As for its diaphaneity, it enjoyeth that most eminently; as having its earthly and salinous parts so exactly resolved, that its body is left imporous, and not *discreted* by atomical terminations. *Browne.*

Discrete quantity, or different individuals, are measured by number without any breaking continuity; that is, in things that have continuity, as continued quantity and motion. *Hale's Origin of Mankind.*

Discretive propositions are such wherein various, and seemingly opposite, judgments are made, whose variety or distinction is noted by the particles but, though, yet, &c. as, travellers may change their climate, but not their temper; Job was patient, though his grief was great. *Watts.*

DISCRETE, or DISJUNCT, PROPORTION is that in which the ratio between two or more pairs of numbers is the same, and yet the proportion is not continued, as the ratio between 3 : 6 is the same as that between 8 : 16, and therefore the numbers are proportional; but it is only discretely or disjunctly, for 3 is not to 6 as 6 to 8; that is, the proportion is broken off between 8 and 3, and is not continued as in the following continual proportionals:—

3 : 6 : : 12 : 24.

DISCRIM'INATE, *v. a.* & *adj.* }
DISCRIMI'NABLE, *adj.* }
DISCRIM'INATELY, *adv.* }
DISCRIMI'NATENESS, *n. s.* } Lat. *discrimino*, from Gr. δις and κρινω, to judge. To mark a difference; distinguished by tokens; select; separate. As an adjective, distinguished by marks. Discriminable is distinguishable. Discriminous is an obsolete word for critical, hazardous.
DISCRIMINA'TION, }
DISCRIM'INATIVE, , *adj.* }
DISCRIM'INOUS. }

Oysters and cockles and muscles, which move not, have no *discriminate* sex. *Bacon.*

Take heed of abetting any factions, or applying any publick *discriminations* in matters of religion. *King Charles.*

There are three sorts of it differing in fineness from each other, and *discriminated* by the natives by three peculiar names. *Boyle.*

Discriminative Providence knew before the nature and course of all things. *More's Antidote against Atheism.*

There may be ways of *discriminating* the voice; as by acuteness and gravity, the several degrees of raising and falling from one tone or note to another. *Holder.*

Any kind of spitting of blood imports a very *discriminous* state, unless it happens upon the gaping of a vein opened by a plethory. *Harvey.*

There is a reverence to be shewed them on the account of their *discrimination* from other places, and separation for sacred uses. *Stillingfleet.*

The right hand is *discriminated* from the left by a natural, necessary, and never to be confounded distinction. *South.*

The only standing test and *discriminative* characteristick of any metal or mineral, must be sought for in the constituent matter of it. *Woodward.*

By that prudent *discrimination* made between the offenders of different degrees, he obliges those whom he has distinguished as objects of mercy. *Addison.*

DIS'CROWN, *v. a.* From *dis* and crown. To deprive of a crown.

Through storm and darkness yawns the rending ground,
The gulf is thick with phantoms, but the chief
Seems royal still, though with her head *discrowned*,
And pale, but lovely, with maternal grief
She clasps a babe, to whom her breast yields no relief. *Byron.*

DISCU'BITORY, *adj.* Lat. *discubitorius*. Fitted to the posture of leaning.

After bathing they retired to bed, and refreshed themselves with a repast; and so that custom, by degrees, changed their cubiculary beds into *discubitory*.
Browne's Vulgar Errours.

DISCUM'BENCY, *n. s.* Lat. *discumbens*. The act of leaning at meat, after the ancient manner. See ACCUBATION.

The Greeks and Romans used the custom of *discumbency* at meals, which was upon their left side; for so their right hand was free and ready for all service.
Browne's Vulgar Errours.

DISCUM'BER, *v. a. Dis* and cumber. To disengage from any troublesome weight; to disengage from impediment.

His limbs *discumbered* of the clinging vest,
He binds the sacred cincture round his breast,
Pope.

DISCURE', *v. a.* Fr. *decouvrir*. To discover; to reveal.

I will, if please you, it *discure*, assay
To ease you of that ill. *Faerie Queene.*

DISCUR'SIVE, *adj.* } Fr. *discursif*; from
DISCUR'SIVELY, *adv.* } Lat. *discurro*. Moving
DISCUR'SORY, *adj.* } here and there; roving; desultory; as a corruption of discoursive. Proceeding by gradation from premises to consequences; and thus discursory is argumentative.

Some noises help sleep; as the blowing of the wind, and the trickling of water: they move a gentle attention; and whatsoever moveth attention, without too much labour, stilleth the natural and *discursive* motion of the spirits. *Bacon.*

There is a sanctity of soul and body, of more efficacy for the receiving of divine truths, than the greatest pretences to *discursive* demonstration.
More's Divine Dialogues.

There hath been much dispute touching the knowledge of brutes, whether they have a kind of *discursive* faculty, which some call reason.
Hale's Origin of Mankind.

We have a principle within, whereby we think, and we know we think; whereby we do *discursively*, and by way of ratiocination, deduce one thing from another. *Id.*

DIS'CUS, *n. s.* Lat. A quoit; a heavy piece of iron thrown in the ancient sports. See DISC.

From Elatreus' strong arm the *discus* flies,
And sings with unmatched force along the skies.
Pope.

DISCUSS', *v. a.* } Fr. *discuter*; Span. and
DISCUS'SER, *n. s.* } Port. *discutir*; Ital. and
DISCUS'SIVE, *adj.* } Lat. *discutere*, *dis* and *quatio*, to shake down or attack by battering. To examine, or clear by disquisition; to ventilate; to clear up; to disperse matter or humors of the body.
DISCUS'SION, *n. s.* }

Many arts were used to *discuss* the beginnings of new affection. *Wotton.*

Consider the threefold effect of Jupiter's trisulk, to burn, *discuss*, and terebrate.
Browne's Vulgar Errours.

Truth cannot be found without some labour and intention of the mind, and the thoughts dwelling a considerable time upon the survey and *discussion* of each particular. *South.*

His usage was to commit the *discussing* of causes privately to certain persons learned in the laws.
Ayliffe's Parergon.

If by the liberty of the press, we understand merely the liberty of *discussing* the propriety of public measures and political opinions, let us have as much of it as you please. *Franklin.*

DISCU'TIENT, *n. s.* Lat. *discutiens*. A medicine that has power to repel or drive back the matter of tumors in the blood. It sometimes means the same as carminative.

The swellings arising from these require to be treated, in their beginning, with moderate repellents and *discutients*. *Wiseman.*

DISCUTIENTS, in surgery, are such external remedies as, by their subtilty, dissolve or disperse a stagnating or coagulated fluid in any part of the body.

DISDAIN', *v. a., v. n.* & *n. s.* } Fr. *dedaigner*;
DISDAIN'FUL, *adj.* } Sp. *desdignar*;
DISDAIN'FULLY, *adv.* } Lat. *dedignari*;
DISDAINFULNESS, *n. s.* } (*de* privative, and *dignor*.) To esteem unworthy. As an active verb it signifies to scorn: as a substantive, contempt; scorn; indignation united with contempt. Disdainfulness is synonymous with disdain.

Children being haughty, through *disdain* and want of nurture, do stain the nobility of their kindred.
Ecclus.

A proud disdainfulness of other men.
Ascham.

His angry steede did chide his foaming bitt,
As much *disdayning* to the curbe to yield:
Full jolly knight he seemed and faire did sitt,
As one for knightly giusts and fierce encounters fitt.
Spenser. Faerie Queene.

There will come a time when three words, uttered with charity and meekness, shall receive a far more blessed reward, than three thousand volumes, written with *disdainful* sharpness of wit. *Hooker.*

The queen is obstinate,
Stubborn to justice, apt to' accuse it,
Disdainful to be tried by 't. *Shakspeare.*

Either greet him not,
Or else *disdainfully*, which shall shake him more.
Id.

Can I forget, when they in prison placing her,
With swelling heart, in spite and due *disdainfulness*,
She lay for dead, till I helped with unlacing her.
Sidney.

The *disdainful* soul came rushing through the wound. *Dryden.*

It is not to insult and domineer, to look *disdainfully*, and revile imperiously, that procures esteem from any one. *South.*

Tell him, Cato
Disdains a life which he has power to offer.
Addison.

But against you, ye Greeks, ye coward train,
Gods? how my soul is moved with just *disdain!*
Pope's Odyssey.

But no one ever heard her speak or shriek,
Although her paroxysm drew towards its close:
Hers was a phrensy which *disdained* to rave,
Even when they smote her, in the hope to save.
Byron.

DISDIACLASTIC Crystal, in natural history, a name given by Bartholine and some others to the pellucid fossil substance, more usually called, from the place whence it was first brought, Iceland crystal; though properly it is no crystal at all, but a fine pellucid spar, called by Dr. Hill from its shape parallelopipedum.

DISEASE' *v. a.* & *n. s.* } *Dis* and ease. To
DISEAS'EDNESS, *n. s.* } afflict with illness; to torment with pain or sorrow; to make morbid; infect: as a substantive, the malady, sickness, &c., endured.

In the world ghe schuler haue *disese*, but triste ghe, I haue ouercome the world. *Wiclif. Jon* xvi.

And Asa, in the thirty and ninth year of his reign, was *diseased* in his feet, and his *disease* was exceeding great; and in his *disease* he sought not to the Lord, but to the physicians. *Chron.*

Full of *diseases* was his carcas blew,
And a dry dropsie through his flesh did flow,
Which by misdiet daily greater grew.
Spenser. Faerie Queene.

We are all *diseased*,
And with our surfeiting and wanton hours
Have brought ourselves into a burning fever.
Shakspeare.

Food improperly taken, not only produces original *diseases*, but affords those that are already engendered both matter and sustenance; so that, let the father of *disease* be what it may, intemperance is certainly its mother. *Burton.*

A lazar-house it seemed, wherein were laid
Numbers of all *diseased*, all maladies
Of ghastly spasm, or racking torture. *Milton.*

Authority is a *disease* and cure,
Which men can neither want nor well endure.
Butler.

We cannot be too jealous, we cannot suspect ourselves too much to labour under the *disease* of pride, which cleaves the closer to us by our belief or confidence that we are quite without it. *Clarendon.*

Though great light be insufferable to our eyes, yet the highest degree of darkness does not at all *disease* them. *Locke.*

This is a restoration to some former state; not that state of indigency and *diseasedness*. *Burnet's Theory.*

Then wasteful forth
Walks the dire power of pestilent *disease*.
Thomson's Summer.

But he was phrenzied,—wherefore, who may know?
Since cause might be which skill could never find;
But he was phrenzied by *disease* or woe,
To that worst pitch of all, which wears a reasoning show. *Byron.*

Disease has been variously defined by physicians, almost every founder of a new system having given a definition of disease, differing in some respects from his predecessors. See Medicine and Nosology. Of all animals, man is subject to the most diseases; and of men, the studious and speculative are most exposed to them. Other animals have their diseases; but they are in small number, because they live more according to nature: nor are plants without them; though their known maladies are few. The ancient Hebrews, who were versed in the study of natural philosophy, and not much accustomed to recur to physical causes, and consult physicians, when they were sick, imputed their diseases generally to evil spirits, the executioners of divine vengeance.

Diseases of Dogs. See Dog and Hydrophobia.

Diseases of Horses. See Farriery.

DISEDG'ED, *adj.* *Dis* and edge. Blunted; obtunded; dulled

I grieve myself
To think, when thou shalt be *disedged* by her
Whom now thou tirest on, how thy memory
Will then be panged by me.
Shakspeare. Cymbeline.

DISEMBARK', *v. a.* & *v. n.* *Dis* and embark. To carry to land; to go on land.

I must unto the road, to *disembark*
Some necessaries.
Shakspeare. Two Gentlemen of Verona.

There *disembarking* on the green sea-side,
We land our cattle, and the spoil divide.
Pope's Odyssey.

DISEMBITTER, *v. a.* *Dis* and embitter. To sweeten; to free from bitterness; to clear from acrimony: an unusual word.

Encourage such innocent amusements as may *disembitter* the minds of men, and make them mutually rejoice in the same agreeable satisfactions.
Addison's Freeholder.

DISEMBOD'IED, *adj.* *Dis* and embodied. Divested of the body; discharged from military service.

Disembodied spirits are generally creatures of the imagination, and of old wondering wit. *Thomas.*

DISEMBOGUE', *v. a.* & *v. n.* Old Fr. *disemboucher.—Skinner.* To pour out at the mouth of a river; to vent: to gain vent; flow.

Rivers
In ample oceans *disembogued*, or lost.
Dryden. Ovid.

By eminences placed up and down the globe, the rivers make innumerable turnings and windings, and at last *disembogue* in several mouths into the sea.
Cheyne.

Rolling down, the steep Timavus raves,
And through nine channels *disembogues* his waves.
Addison.

DISEMBOS'OMED, *part. adj.* *Dis* and embosom. Taken from the bosom.

He ——
Who, *disembosomed* from the Father, bows
The heaven of heavens to kiss the distant earth.
Young.

DISEMBOW'ELLED, *part. adj.* *Dis* and embowel. Taken from out the bowels.

So her *disembowelled* web
Arachne in a hall or kitchen spreads,
Obvious to vagrant flies. *Philips.*

DISEMBROIL', *v. a.* Fr. *debrouiller*. To disentangle; to free from perplexity; to reduce from confusion.

Then earth from air, and seas from earth were driven,
And grosser air sunk from etherial heaven;
Thus *disembroiled*, they take their proper place.
Dryden.

The system of his politicks is *disembroiled*, and cleared of all those incoherences and independent matters that are woven into this motley piece.
Addison's Whig Examiner.

DISENA'BLE, *v. a.* *Dis* and enable. To deprive of power; to disable; to sink into weakness; to weaken.

Now age has overtaken me; and want, a more insufferable evil, through the change of the times, has wholly *disenabled* me. *Dryden.*

DISENCHANT′ *v. a.* *Dis* and enchant. To free from the force of an enchantment; to deliver from the power of charms or spells.

Muse, stoop thy *disenchanted* wing to truth.
Denham.

Alas! let your own brain *disenchant* you. *Sidney.*

Haste to thy work; a noble stroke or two
Ends all the charms, and *disenchants* the grove.
Dryden.

DISENCUM′BER, *v. a.* } *Dis* and encum-
DISENCUM′BRANCE, *n. s.* } ber. To discharge from encumbrances; free from impediment or obstruction; disburden.

Dim night had *disencumbered* heaven. *Milton.*

It will need the actual intention, the particular stress and application of the whole soul, to *disencumber* and set it free, to scour off its rust, and remove those hindrances which would otherwise clog and check the freedom of its operations. *Sprat.*

The *disencumbered* soul
Flew off, and left behind the clouds and starry pole.
Dryden.

Dreams look like the amusements of the soul, when she is *disencumbered* of her machine; her sports and recreations, when she has laid her charge asleep.
Spectator.

There are many who make a figure below what their fortune or merit entitles them to, out of mere choice, and an elegant desire of ease and *disencumbrance.* *Id.*

The church of St. Justina, designed by Palladio, is the most handsome, luminous, *disencumbered* building, in the inside, that I have ever seen.
Addison on Italy.

DISENGAGE′, *v. a.* & *v. v.* } *Dis* and en-
DISENGAGED′, *part. adj.* } gage. To re-
DISENGAGED′NESS, *n. s.* } lieve from duty
DISENGAGE′MENT. } or obligation; to withdraw from duty, obligation, or engagement. Hence disengagement, and disengagedness, are applied to any state of freedom or vacancy.

When our mind's eyes are *disengaged* and free,
They clearer, farther, and distinctly see. *Denham.*

Some others, being very light, would float up and down a good while, before they could wholly *disengage* themselves and descend. *Burnet's Theory.*

Providence gives us notice, by sensible declensions, that we may *disengage* from the world by degrees.
Collier on Thought.

In the next paragraph, I found my author pretty well *disengaged* from quotations. *Atterbury.*

The consideration that should *disengage* our fondness from worldly things, is, that they are uncertain in their foundation; fading, transient, and corruptible in their nature. *Rogers.*

It is very hard for the mind to *disengage* itself from a subject on which it has been long employed.
Addison.

The great use of light to vegetation would appear from this theory to be by *disengaging* vital air from the water which they perspire, and thence to facilitate its union with their blood exposed beneath the thin surface of their leaves. *Darwin.*

A man purposes his schemes of life in a state of abstraction and *disengagement*, exempt from the enticements of hope, the solicitations of affection, the importunities of appetite, or the depressions of fear.
Johnson.

DISENTAN′GLE, *v. a.* *Dis* and entangle. To unfold or loosen the parts of a thing; to free from impediment or perplexity; separate; distinguish

Though in concretions particles so entangle one another, that they cannot in a short time clear themselves, yet they do incessantly strive to *disentangle* themselves, and get away. *Boyle.*

Till they could find some expedient to explicate and *disentangle* themselves out of this labyrinth, they made no advance towards supplying their armies.
Clarendon.

The welfare of their souls requires a better judgment than their own, either to guide them in their duty, or to *disentangle* them from a temptation.
South.

Neither can God himself be otherwise understood by us than as a mind free and *disentangled* from all corporeal mixtures. *Stillingfleet.*

Wherever I turned my view, there was perplexity to be *disentangled*, and confusion to be regulated.
Johnson. Preface to Dictionary.

DISENTER′, *v. a.* *Dis* and Fr. *enterrer*. To unbury; to take out of the grave.

Though the blindness of some fanaticks have savaged on the bodies of the dead, and have been so injurious unto worms as to *disenterre* the bodies of the deceased, yet had they therein no design upon the soul. *Browne's Vulgar Errours.*

DISENTHRAL′, *v. a.* *Dis* and enthral. To set free; to restore to liberty; to rescue from slavery.

If religion were false, bad men would set the utmost force of their reason on work to discover that falsity, and thereby *disenthral* themselves. *South.*

But God my soul shall *disenthral*;
For I upon his name will call. *Sandys.*

DISENTHRONE′, *v. a.* *Dis* and enthrone. To depose from sovereignty; to dethrone.

Either to *disenthrone* the King of heaven
We war, if war be best; or to regain
Our own right lost. *Milton.*

DISENTRANCE′, *v a.* *Dis* and entrance. To awaken from a trance, or deep sleep.

Ralpho, by this time *disentranced*,
Upon his bum himself advanced. *Hudibras.*

DISESPOUSE′, *v. a.* *Dis* and espouse. To separate after faith plighted.

Such was the rage
Of Turnus, for Lavinia *disespoused*. *Milton.*

DISESTEEM′, *v. a.* & *n. s.* } From *dis* and
DISESTIMA′TION, *n. s.* } esteem. To disregard, or regard slightly: slight regard.

But if this sacred gift you *disesteem*,
Then cruel plagues shall fall on Priam's state.
Denham.

When any one, by miscarriage, falls into *disesteem*, he will fall under neglect and contempt.
Locke.

I would not be thought to *disesteem* or dissuade the study of nature. *Id.*

Should Mars see't,
That horrid hurrier of men, or she that betters him,
Minerva, never so incensed, they could not *disesteem*.
Chapman.

DISFA'VOR, *v. a.* & *n. s.* *Dis* and favor. To discountenance; withhold, or withdraw kindness: discountenance; slight regard; unfavorable circumstance; an unfavored state.

It was verily thought, that had it not been for four great *disfavourers* of that voyage, the enterprize had succeeded. *Bacon.*

While free from sacrilege, he was at peace, as it were, with God and man; but after his sacrilege he was in *disfavour* with both. *Spelman.*

Might not those of higher rank, and nearer access to her majesty, receive her own commands, and be countenanced or *disfavoured* according as they obey? *Swift.*

DISFIG'URE, *v. a.* DISFIGURA'TION, *n. s.* DISFIG'UREMENT. *Dis* and figure. To deform; to change any thing to a worse form; to mangle.

You are but as a form in wax
By him imprinted, and within his power
To leave the figure, or *disfigure* it. *Shakspeare.*

Abject is their punishment,
Disfiguring not God's likeness, but their own,
Or, if his likeness, by themselves defaced. *Milton.*

A nose flatter, or a mouth wider, could have consisted, as well as the rest of his figure, with such a soul and such parts as made him, *disfigured* as he was, capable to be a dignitary in the church. *Locke.*

That understanding, in which, though little is written, yet nothing is blotted; that which is not *disfigured* by ill impressions, is a subject most capable of the best. *Sprat.*

Nor would his slaughtered army now have lain,
On Afric's sands, *disfigured* with their wounds,
To gorge the wolves and vultures of Numidia.
Addison's Cato.

The *disfigurement* that travel or sickness has bestowed upon him, is not thought great by the lady of the isle. *Suckling.*

Our foot half sunk in hillocks green and soft,
Raised by the mole, the miner of the soil.
He, not unlike the great ones of mankind,
Disfigures earth. *Cowper.*

DISFOR'EST, *v. a.* *Dis* and forest. To reduce land from the privileges of a forest to the state of common land.

DISFRAN'CHISE, *v. a.* DISRANCHISE'MENT, *n. s.* *Dis* and franchise. To deprive of privileges or immunities.

DISFU'RNISH, *v. a.* *Dis* and furnish. To deprive; to unfurnish; to strip.

My riches are these poor habiliments,
Of which if you should here *disfurnish* me,
You take the sum and substance that I have.
Shakspeare.

He durst not *disfurnish* that country either of so great a commander, or of the wonted garrisons. *Knolles's History.*

DISGAR'NISH, *v. a.* *Dis* and garnish. To strip of ornaments; to take guns from a fortress.

DISGLO'RIFY, *v. a.* *Dis* and glorify. To deprive of glory; treat with indignity.

So Dagon shall be magnified, and God,
Besides whom is no god, compared with idols,
Disglorified, blasphemed, and had in scorn.
Milton.

DISGORGE, *v. a.* Fr. *degorger*, from gorge, the throat. To discharge by the mouth; vomit; pour out violently.

So, so, thou common dog, didst thou *disgorge*
Thy glutton bosom of the royal Richard?
And now thou wouldst eat thy dead vomit up.
Shakspeare.

The deep-drawing barks do there *disgorge*
Their warlike fraughtage. *Id.*

They move along the banks
Of four infernal rivers that *disgorge*
Into the burning lake their baleful streams.
Milton.

Countries much annoyed with earthquakes have volcanoes; and these are constantly all in flames, whenever any earthquake happens; they *disgorging* that fire which was the cause of the disaster. *Derham.*

From the distant shore they loudly laught,
To see his heaving breast *disgorge* the briny draught.
Dryden

DISGRACE', *v. a.* & *n. s.* DISGRA'CER, DISGRACE'FUL, *adj.* DISGRACE'FULLY, *adv.* DISGRACE'FULNESS, DISGRA'CIOUS. Fr. *disgrace*. To bring reproach or dishonor upon; to bring to shame, or disfavor. Disgraceful is, shameful; dishonorable: disgracious, unpleasing.

We may not so in any one special kind admire her, that we *disgrace* her in any other; but let all her ways be according unto their place and degree adored. *Hooker.*

Like a dull actor, now
I have forgot my part, and I am out
Even to a full *disgrace*. *Shakspeare.*

I do suspect I have done some offence,
That seems *disgracious* in the city's eye. *Id*

The senate have cast you forth
Disgracefully, to be the common tale
Of the whole city. *Ben Jonson's Catiline.*

Masters must correct their servants with gentleness, prudence, and mercy; not with upbraiding and *disgraceful* language, but with such only as may express and reprove the fault, and amend the person. *Taylor's Rule of Living Holy.*

And he whose affluence disdained a place,
Bribed by a title, makes it a *disgrace*. *Browne.*

To such bondage he was for so many courses tied by her, whose *disgraces* to him were graced by her excellence. *Sidney.*

And is it not a foul *disgrace*,
To lose the boltsprit of thy face? *Baynard.*

Men's passions will carry them far in misrepresenting an opinion which they have a mind to *disgrace*. *Burnet.*

I have given good advice to those infamous *disgracers* of the sex and calling. *Swift.*

To retire behind their chariots, was as little *disgraceful* then, as it is now to alight from one's horse in a battle. *Pope.*

Grant me, kind heaven, to find some happier place,
Where honesty and sense are no *disgrace*.
Dr. Johnson's Poems.

DISGUISE', *v. a.* & *n. s.* DISGUI'SER, *n. s.* DISGUISE'MENT. Fr. *deguiser*; *dis* and guise. To conceal by an unusual guise, or dress: the dress worn in disguise. disguiser, he who wears it.

How might we *disguise* him?
Alas! I know not: there is no woman's gown big enough for him. *Shaksp. Merry Wives of Windsor.*

We see we've burnt our cheeks; and mine own tongue
Splits what it speaks: the wild *disguise* hath almost Antickt us. *Id. Antony and Cleopatra.*

Death's a great *disguiser*. *Shakspeare.*

The marquis thought best to dismask his beard, and told him, that he was going covertly to take a secret view of the forwardness of his majesty's fleet: this did somewhat handsomely heal the *disguisement*. *Wotton.*

Disguised he came; but those his children dear
Their parent soon discerned through his *disguise*. *Milton.*

Under that *disguisement* I should find opportunity to reveal myself to the owner of my heart. *Sidney.*

Since I in Arcite cannot Arcite find,
The world may search in vain with all their eyes,
But never penetrate through this *disguise*.
Dryden's Fables.

I hope he is grown more disengaged from his intentness on his own affairs, which is quite the reverse to you, unless you are a very dexterous *disguiser*. *Swift.*

I have just left the right worshipful, and his myrmidons, about a sneaker of five gallons; the whole magistracy was pretty well *disguised* before I gave them the slip. *Spectator.*

They generally act in a *disguise* themselves, and therefore mistake all outward show and appearances for hypocrisy in others. *Addison.*

Hence guilty joys, distaste, surmises,
False oaths, false tears, deceits, *disguises*. *Pope.*

This discovers ourselves to us; pierces into the inmost recesses of the mind; strips off every *disguise*; lays open the inward part; makes a strict scrutiny into the very soul and spirit. *Mason.*

And is it thus Demetrius meets his friend,
Hid in the mean *disguise* of Turkish robes?
Johnson. Irene.

My temper is naturally open; and it ought, assuredly, to be without *disguise* to a manwhom I wish no longer to look upon as an antagonist, but a friend. *Bp. Watson.*

DISGUST, *v. a.* & *n. s.* } Fr. *degouter*; Lat. *degusto*. To raise aversion in the stomach: hence, to cause distaste, or dislike generally. Disgustful is nauseous.
DISGUST'FUL, *adj.* }

Pleasure is no rule of good; since, when we follow pleasure, merely, we are *disgusted*, and change from one sort to another; condemning that at one time, which at another we earnestly approve. *Shaftesbury.*

The manner of doing is of more consequence than the thing done, and upon that depends the satisfaction or *disgust* wherewith it is received. *Locke.*

If a man were *disgusted* at marriage, he would never recommend it to his friend. *Atterbury.*

What *disgusts* me from having to do with answer-jobbers is, that they have no conscience. *Swift.*

I have finished the most *disgustful* task that ever I undertook. *Id.*

Those unenlarged souls are *disgusted* with the wonders which the microscope has discovered. *Watts.*

Thence dark *disgust* and hatred, winding wiles,
Coward deceit, and ruffian violence. *Thomson.*

Paltry affectation, strained allusions, and *disgusting* finery, are easily attained by those who chuse to wear them. *Goldsmith.*

DISH, *n. s.* & *v. a.* }
DISH-CLOUT, *n. s.* }
DI'SHING, *part. adj.* } Saxon, disch; Goth. *disk*; Erse. *dysc*; Wel. *dysgel*; Teut. *tisch*, from
DISH-WASHER. } Gr. δισκος; Lat. *discus*, (à δικω, to hurl) a round plate of iron, or other metal, hurled in the games. See DISCUS. A broad vessel used for setting food on a table, or to contain liquids: hence the food contained in a dish, and a measure of quantity; and, as a verb, to place in a dish, or dishes; to serve up. Dish-clout, the useful cloth for cleaning dishes. Dishing, of a hollow, dish-like shape. Dish-washer, the name of a bird; mergus.

And sche bifore warnid of hir modir seide give thou to me heere the head of Jon Baptist in a *dische*. *Wiclif. Matt.* 14.

The earth's face is but a table; there are set
Plants, cattle, men, *dishes*, for death to eat. *Donne.*

Let 's kill him boldly, but not wrathfully;
Let 's carve him as a *dish* fit for the gods,
Not hew him as a carcass fit for hounds. *Shakspeare.*

For conspiracy,
I know not how it tastes, though it be *dished*
For me to try. *Id.*

A *dish-clout* of Jaquenetta's be wears next his heart for a favor. *Id.*

They measure block-tin by the *dish*, which containeth a gallon. *Carew.*

Who would rob a hermit of his weeds,
His few books, or his beads, or maple *dish*;
Or do his grey hairs any violence? *Milton.*

Many people would, with reason, prefer the griping of an hungry belly, to those *dishes* which are a feast to others. *Locke.*

A ladle for our silver *dish*,
Is what I want, is what I wish. *Prior.*

Send them up to their masters with a *dish-clout* pinned at their tails. *Swift's Directions to the Cook.*

For the form of the wheels, some make them more *dishing*, as they call it, than others; that is, more concave, by setting off the spokes and fellies more outwards. *Mortimer.*

'Tis not the meat, but 'tis the appetite,
Makes eating a delight;
And if I like one *dish*
More than another, that a pheasant is. *Suckling.*

The same care and toil that raise a *dish* of peas at Christmas, would give bread to a whole family during six months. *Hume.*

Suppose the ancient luxury of a *dish* of peacocks' brains were to be revived, how many carcasses would be left to the poor at a cheap rate! and as to the rout that is made about people who are ruined by extravagance, it is no matter to the nation tha some individuals suffer. *Johnson.*

DISHABILLE', *n. s.* & *adj.* Fr. *deshabillé*. Undress; loose, or negligently dressed.

Queens are not to be too negligently dressed or *dishabille*. *Dryden's Dufresnoy.*

A woman, who would preserve a lover's respect to her person, will be careful of her appearance before him when in *dishabille*. *Clarissa.*

DISHAB'IT, *v. a.* To throw out of place; to drive from their habitation.

But for our approach those sleeping stones
By the compulsion of their ordinance,

By this time from their fixed beds of lime
Had been *dishabited*, and wide havock made.
Shakspeare. King Lear.

DISHAR'MONY, *n. s.* *Dis* and harmony. Contrariety to harmony.

DISHEART'EN, *v. a.* *Dis* and hearten. To discourage; to deject; to terrify; to depress.

To *dishearten* with fearful sentences, as though salvation could hardly be hoped for, is not so consonant with Christian charity. *Hooker.*

Be not *disheartened* then, nor cloud those looks
That wont be more chearful and serene. *Milton.*

Yet neither thus *disheartened* nor dismayed,
The time prepared I waited. *Id.*

Shortly, some harsh and unpleasing answer so *disheartened* me, that I resolved to embrace the first opportunity of my remove.
Bp. Hall's Account of himself.

It is a consideration that might *dishearten* those who are engaged against the common adversaries, that they promise themselves as much from the folly of enemies, as from the power of their friends.
Stillingfleet.

Men cannot say, that the greatness of an evil and danger is an encouragement to men to run upon it; and that the greatness of any good and happiness ought in reason to *dishearten* men from the pursuit of it. *Tillotson.*

A true christian fervour is more than the alliances of our potent friends, or even the fears of our *disheartened* enemies. *Atterbury.*

DISHER'IT, *v. a.* } See DISINHERIT.
DISHER'ISON, *n. s.* }

DISHEV'EL, *v. a.* Fr. *decheveler*. To spread the hair disorderly; to throw the hair of a woman negligently about her head.

A gentle lady all alone,
With garments rent and hair *dishevelled*,
Wringing her hands, and making piteous moan.
Spenser.

A troop of Trojans mixed with these appear,
And mourning matrons with *dishevelled* hair.
Dryden's Æneid.

You this morn beheld his ardent eyes,
Saw his arm locked in her *dishevelled* hair. *Smith.*

Headlong he rushes through the affrighted air
With limbs distorted, and *disheveled* hair,
Whirls round and round, the flying crowd alarms,
And death receives him in his sable arms!—
Darwin.

Had you touched a hair
Of those *dishevelled* locks, I would have thinned
Your ranks more than the enemy. *Byron.*

DISHON'EST, *adj.* } *Dis* and honest.
DISHON'ESTLY, *adv.* } Void of probity: void of faith; faithless; wicked; fraudulent.

A wise daughter shall bring an inheritance to her husband; but she that liveth *dishonestly* is her father's heaviness. *Ecc.* xxii. 4.

Mrs. Ford, the honest woman, the modest wife, the virtuous creature, that hath the jealous fool to her husband! I suspect without cause, mistress, do I?—Heaven be my witness you do, if you suspect me in any *dishonesty*. *Shakspeare.*

I protest he had the chain of me,
Tho' most *dishonestly* he doth deny it. *Id.*

Dishonest with lopped arms the youth appears,
Spoiled of his nose, and shortened of his ears.
Dryden.

He lays it down as a principle, that right and wrong, honest and *dishonest*, are defined only by laws, and not by nature. *Locke.*

Justice then was neither blind to discern, nor lame to execute. It was not subject to be imposed upon by a deluded fancy, nor yet to be bribed by a glozing appetite, for an utile or jucundum to turn the balance to a false or *dishonest* sentence. *South.*

Their fortune depends upon their credit, and a stain of open public *dishenesty* must be to their disadvantage. *Swift.*

She saw her sons with purple death expire,
Her sacred domes involved in rolling fire;
A dreadful series of intestine wars,
Inglorius triumphs, and *dishonest* scars. *Pope.*

DISHON'OR, *v. a.* & *n. s.* } *Dis* and honor. To disgrace; to bring shame upon; to blast with infamy: a dishonorer is he who treats another with indignity.
DISHON'ORER. }

He that is honoured in poverty, how much more in riches! and he that is *dishonourable* in riches, how much more in poverty! *Ecclus.* x. 31.

Let not my jealousies be your *dishonours*,
But mine own safeties. *Shakspeare. Macbeth.*

It is no vicious blot, murther, or foulness,
No unchaste action, or *dishonoured* step,
That hath deprived me of your grace and favour.
Id.

Preaching how meritorious with the gods
It would be, to ensnare an irreligious
Dishonourer of Dagon. *Milton.*

Take him for your husband and your lord;
'Tis no *dishonour* to confer your grace
On one descended from a royal race.
Dryden's Fables.

He was pleased to own Lazarus even in the *dishonours* of the grave, and vouchsafed him, in that despicable condition, the glorious title of his friend.
Boyle's Seraphick Love.

To pay for, personate, and keep in a man's hands a greater estate than he really has, is of all others, the most unpardonable vanity, and must in the end reduce the man who is guilty of it to *dishonour*.
Steele.

It is a mighty shame and *dishonour* to employ excellent faculties and abundance of wit, to humour and to please men in their vices and follies.
Sir. R. Blackmore.

But what is most *dishonourable* of all is, for a man at once to discover a great genius and an ungoverned mind. *Mason.*

DOGE. Would'st thou repeat them?
Would'st thou repeat them—thou, a Faliero,
Harp on the deep *dishonour* of our house,
Dishonoured in its chief—that chief the prince
Of Venice, first of cities? To the sentence.
Byron.

DISHORN', *v. a.* *Dis* and horn. To strip of horns.

We'll *dishorn* the spirit,
And mock him home to Windsor.
Shakspeare.

DISHU'MOR, *n. s.* *Dis* and humor. Peevishness; ill humor; uneasy state of mind.

Speaking impatiently to servants, or any thing that betrays inattention or *dishumour*, are also criminal.
Spectator.

DISIMPROVE'MENT, *n. s.* *Dis* and improvement. Reduction from a better to a worse state; the contrary to melioration; the contrary to improvement.

The final issue of the matter would be, an utter neglect and *disimprovement* of the earth. *Norris.*

I cannot see how this kingdom is at any height of improvement, while four parts in five of the plantations, for thirty years past, have been real *disimprovements.* *Swift.*

DISINCAR'CERATE, *v. a.* *Dis* and incarcerate. To set at liberty; to free from prison.

The arsenical bodies being now coagulated, and kindled into flaming atoms, require dry and warm air, to open the earth for to *disincarcerate* the same venene bodies. *Harvey.*

DISINCLI'NE, *v. a.* } *Dis* and incline.
DISINCLINA'TION, *n. s.* } To produce dislike to; to make disaffected; to alienate affection from. Want of affection or alienation.

They were careful to keep up the fears and apprehensions in the people of dangers and designs, and to *disincline* them from any reverence or affection to the queen, whom they begun every day more implacably to hate, and consequently to disoblige. *Clarendon.*

Disappointment gave him a *disinclination* to the fair sex, for whom he does not express all the respect possible. *Arbuthnot and Pope.*

What are those duties which we read or hear of from the word of God, to which we find ourselves most *disinclined?* This, in all likelihood, will help us to detect some of our peculiar sins of omission. *Mason.*

DISINGENU'ITY, *n. s.* From disingenuous. Meanness of artifice; unfairness.

They contract a habit of ill-nature and *disingenuity* necessary to their affairs, and the temper of those upon whom they are to work. *Clarendon.*

DISINGEN'UOUS, *adj.* } *Dis* and ingenu-
DISINGEN'UOUSLY, *adv.* } ous. Unfair; mean-
DISINGEN'UOUSNESS, *n. s.* } ly artful; subtle; sly; illiberal.

'Tis *disingenuous* to accuse our age
Of idleness, who all our powers engage
In the same studies, the same course to hold,
Nor think our reason for new arts too old.
Denham.

It was a *disingenuous* way of proceeding, to oppose a judgment of charity concerning their church, to a judgment of reason concerning the nature of actions. *Stillingfleet.*

There cannot be any thing so *disingenuous* and misbecoming any rational creature, as not to yield to plain reason, and the conviction of clear arguments. *Locke.*

I might press them with the unreasonableness, the *disingenuousness* of embracing a profession to which their own hearts have an inward reluctance. *Government of the Tongue.*

DISINHER'IT, *v. a.* } All from *dis* and in-
DISINHER'ISON, *n. s.* } herit. To cut off he-
DISHER'IT, *v. a.* } reditary succession or
DISHER'ISON, *n. s.* } inheritance. The last two words are only the older mode of spelling.

He tries to restore to their rightful heritage such good old English words as have been long time out of use, almost *disherited.* *Spenser.*

If he stood upon his own title of the house of Lancaster, inherent in his person, he knew it was a title condemned by parliament, and generally prejudged in the common opinion of the realm, that it tended directly to the *disinherison* of the line of York. *Bacon's Henry VII.*

The chief minister of the revenue was obliged to prevent, and even oppose, such *disinherison.* *Clarendon.*

In respect of the enects and evil consequences, the adultery of the woman is worse, as bringing bastardy into a family, and *disinherisons* or great injuries to the lawful children. *Taylor.*

Is it then just with us to *disinherit*
The unborn nephews for the father's fault?
Davies.

Unmuffle, ye faint stars; and thou, fair moon,
Stoop thy pale visage through an amber cloud,
And *disinherit* chaos that reigns here
In double night of darkness, and of slander. *Milton.*

Of how fair a portion Adam *disinherited* his whole posterity by one single prevarication! *South.*

Nor how the Dryads and the woodland train,
Disherited, ran howling o'er the plain.
Dryden's Fables.

DISINTER', *v. a.* From *dis* and inter. To unbury; to take as out of the grave.

The philosopher, the saint, or the hero, the wise, the good, or the great man, very often lie hid and concealed in a plebeian, which a proper education might have *disinterred.* *Addison.*

DISINTERESSED, *adj.* *Dis* and Fr. *interessé.* Written disinterested generally, and more properly. Without regard to private advantage; not biassed by particular views; impartial.

Not that tradition's parts are useless here,
When general, old, *disinteressed,* and clear.
Dryden.

DISINTERESSMENT, *n. s.* *Dis* and Fr. *interessement.* Disregard to private advantage; disinterest; disinterestedness. This word is merely a Gallicism.

He has managed some of the charges of the kingdom with known ability, and laid them down with entire *disinteressment.* *Prior's Postscript.*

DISINTEREST, *n. s.* } *Dis* and interest.
DISINTERESTED, *adj.* } What is contrary to
DISINTERESTEDLY, *adv.* } one's interest, desire,
DISINTERESTEDNESS, *n. s.* } or prosperity; that which any one is concerned to prevent: indifference to one's own advantage.

These expressions of selfishness and *disinterestedness* have been used in a very loose and indeterminate manner. *Browne.*

They judge it the great *disinterest* to Rome. *Glanville.*

As *disinterested* as you appear to the world, no man is more in the power of that prevailing favourite passion than yourself. *Swift.*

It is usual with persons who mount the stage for the cure or information of the crowd about them, to make solemn professions of their being wholly *disinterested* in the pains they take in public good. *Steele.*

DISINTITLED, *part. adj.* *Dis* and intitled Not entitled.

Yet J. S. and his little convention of four or five brothers of the tradition have clearly *disintitled* themselves to any use of these (the Scriptures, &c.) *Bp. Taylor*

DISI'NTRICATE, *v. a.* *Dis* and intricate. To disentangle.

DISJO'IN, *v. a.* Fr. *disjoindre; dis* and join. To separate; to part from each other; to disunite; to sunder.

Never shall my harp thy praise
Forget, nor from thy father's praise *disjoin*.
Milton.

Lest different degree
Disjoin us, and I then too late renounce
Deity for thee, when fate will not permit. *Id.*

Happier for me, that all our hours assigned
Together we had lived; even not in death *disjoined*.
Dryden.

Never let us lay down our arms against France, till we have utterly *disjoined* her from the Spanish monarchy. *Addison.*

DISJOI'NT, *v. a.*, *v.*, *n.*, & *part.* *Dis* and joint. To put out of joint. As a neuter verb, to fall in pieces.

Young Fontinbras,
Holding a weak supposal of our worth,
Thinks by our late dear brother's death
Our state to be *disjoint* and out of frame.
Shakspeare. Hamlet.

The constancy of your wit was not wont to bring forth such *disjointed* speeches. *Sidney.*

Be all their ligaments at once unbound,
And their *disjointed* bones to powder ground.
Sandys.

Yet what could swords or poison, racks or flame,
But mangle and *disjoint* the brittle frame?
More fatal Henry's words: they murdered Emma's fame. *Prior.*

I asked a gentleman the other day that is famous for a good carver (at which acquisition he is out of countenance, imagining it may detract from some of his more essential qualifications) to help me to something that was near him; but he excused himself, and blushing told me, of all things he could never carve in his life; though it can be proved upon him that he cuts up, *disjoints*, and uncases, with incomparable dexterity. *Spectator.*

Rotation must disperse in air
All things which on the rapid orb appear;
And if no power that motion should controul,
It must *disjoint* and dissipate the whole. *Blackman.*

Mouldering arches, and *disjointed* columns. *Irene.*

Rocks reared on rocks in huge *disjointed* piles
Form the tall turrets, and the lengthened aisles;
Broad ponderous piers sustain the roof, and wide
Branch the vast rainbow ribs from side to side.
Darwin.

DISJU'DICATION, *n. s.* Lat. *dijudicatio.* Judgment; determination: perhaps only mistaken for *dijudication*.

The disposition of the organ is of great importance in the *disjudications* we make of colours.
Boyle on Colours.

DISJUNCT', *adj.* } Lat. *disjunctus*. Dis-
DISJUNC'TION, *n. s.* } joined; separate: dis-
DISJUNC'TIVE, *adj.* } union; incapable of union.

You may
Enjoy your mistress now, from whom you see
There's no *disjunction* to be made, but by
Your ruin. *Shakspeare. Winter's Tale.*

There is a great analogy between the body natural and politic, in which the ecclesiastical or spiritual part justly supplies the part of the soul; and the violent separation of this from the other, does as certainly infer death and dissolution, as the *disjunction* of the body and the soul in the natural. *South.*

Such principles, whose atoms are of that *disjunctive* nature, as not to be united in a sufficient number to make a visible mass. *Grew.*

A *disjunctive* proposition, in logic, is when the parts are opposed to one another by *disjunctive* particles. The truth of *disjunctives* depends on the necessary and immediate opposition of the parts. *Watts's Logick.*

There are such words as *disjunctive* conjunctions.
Id.

What he observes of the numbers *disjunctively* and apart, reason suggests to be applicable to the whole body united. *Causes of the Decay of Piety.*

DISK, *n. s.* Lat. *discus*. A quoit. The face of the sun, or any planet, as it appears to the eye.

The *disk* of Phœbus, when he climbs on high,
Appears at first but as a blood-shot eye. *Dryden.*

The crystal of the eye, which in a fish is a ball, in any land animal is a *disk* or bowl; being hereby fitted for the clearer sight of the object. *Grew.*

It is to be considered, that the rays, which are equally refrangible, do fall upon a circle answering to the sun's *disk*. *Newton.*

In areas varied with mosaic art,
Some whirl the *disk*, and some the jav'lin dart.
Pope.

Mercury's *disk*
Can scarce be caught by philosophic eye,
Lost in the near effulgence. *Thomson.*

Where finds philosophy her eagle eye
With which she gazes at yon burning *disk*
Undazzled, and detects and counts his spots.
Cowper.

DISKIND'NESS, *n. s.* *Dis* and kindness. Want of kindness or benevolence; injury; malignity.

This discourse is so far from doing any *diskindness* to the cause, that it does it a real service.
Woodward.

DISLIKE', *v. a.* & *n. s.* } *Dis* and like. To
DISLIKE'FUL, *adj.* } disapprove; to regard without affection; to regard with ill will or disgust.

He then them took, and tempering goodly well,
Their contrary *dislikes* with loved means,
Did place them all in order, and compel
To keep themselves within their sundry reigns,
Together linked with adamantine chains. *Spenser.*

I think it best, by an union of manners and conformity of minds, to bring them to be one people, and to put away the *dislikeful* conceit of the one and the other. *Id. Ireland.*

What most he should *dislike*, seems pleasant to him;
What like, offensive *Shakspeare. King Lear.*

Your *dislikes*, to whom I would be pleasing,
Do cloud my joys with danger and with sorrow.
Id.

God's grace, that principle of his new birth, gives him continual *dislike* to sin.
Hammond's Practical Catechism.

True love to the person cannot long agree with *dislike* of the religion. *Bp. Hall's Contemplations.*

This said Aletes, and a murmur rose
That shewed *dislike* among the Christian peers.
Fairfax.

Whosoever *dislikes* the digressions, or grows weary of them, may throw them away. *Temple.*

Sorrow would have been as silent as thought, as severe as philosophy. It would have rested in inward senses, tacit *dislikes*. *South.*

The jealous man is not angry if you *dislike* another; but if you find those faults which are in his own character, you discover not only your *dislike* of another, but of himself. *Addison.*

There is a point, which whoever can touch, will never fail of pleasing a majority, so great that the *dislikers* will be forced to fall in with the herd. *Swift.*

DISLIK'EN, *v. a.* *Dis* and liken. To make unlike. Unusual.

Muffle your face,
Dismantle you; and, as you can, *disliken*
The truth of your own seeming.
Shakspeare. Winter's Tale.

DISLIKE'NESS, *n. s.* *Dis* and likeness. Dissimilitude; not resemblance; unlikeness.

That which is not designed to represent any thing but itself, can never be capable of a wrong representation, nor mislead us from the true apprehension of any thing by its *dislikeness* to it; and such, excepting those of substances, are all our own complex ideas. *Locke.*

DISLIMB', *v. a.* *Dis* and limb. To dilaniate; to tear limb from limb.

DISLIMN', *v. a.* *Dis* and limn. To unpaint; to strike out of a picture.

That which is now a horse, even with a thought
The rack *dislimns*, and makes it indistinct
As water is in water.
Shakspeare. Antony and Cleopatra.

DI'SLOCATE, *v. a.* } Lat. *dis* and *locus*. To
DISLOCA'TION, *n. s.* } put out of the proper place: a luxation.

Were't my fitness
To let these hands obey my boiling blood,
They 're apt enough to *dislocate* and tear
Thy flesh and bones. *Shakspeare. King Lear.*

The posture of rocks, often leaning or prostrate, shews that they had some *dislocation* from their natural site. *Burnet.*

It might go awry either within or without the upper, as often as it is forcibly pulled to it, and so cause a *dislocation*, or a strain. *Grew's Musæum.*

After some time the strata on all sides of the globe were *dislocated*, and their situation varied, being elevated in some places, and depressed in others. *Woodward.*

She neither broke nor *dislocated* any bones; but received such a contusion below the hip, as crippled her completely. *Cowper. Private Correspondence.*

DISLODGE', *v. a.* & *n.* *Dis* and lodge. To remove from a place; to go away.

The ladies have prevailed,
The Volscians are *dislodged*, and Marcus gone.
Shakspeare.

Soon as midnight brought on the dusky hour,
Friendliest to sleep, and silence, he resolved
With all his legions to *dislodge*. *Milton.*

These senses lost, behold a new defeat,
The soul *dislodging* from another seat.
Dryden's Juvenal.

The shell-fish which are resident in the depths live and die there, and are never *dislodged* or removed by storms, nor cast upon the shores; which the littorales usually are. *Woodward.*

DISLOY'AL, *adj.* }
DISLOY'ALLY, *adv.* } Fr. *desloyal*, *dis* and loyal. Not true to allegiance; faithless; false
DISLOY'ALTY, *n. s.* } to a sovereign; disobedient.

When that tumultuous rage and fearfull deene
Of northerne rebels ye did pacify,
And their *disloiall* powere defaced clene,
The record of enduring memory. *Spenser. Sonnets.*

The lady is *disloyal*.
——— *Disloyal!* The word is too good to paint out her wickedness. *Shakspeare.*

There shall appear such seeming truths of Hero's *disloyalty*, that jealousy shall be called assurance. *Id.*

Let the truth of that religion I profess be represented to judgment, not in the disguises of levity, schism, heresy, novelty, and *disloyalty*. *King Charles.*

Foul distrust and breach
Disloyal; on the part of man, revolt
And disobedience. *Milton.*
Disloyal town!
Speak, didst not thou
Forsake thy faith, and break thy nuptial vow?
Dryden.

DIS'MAL, *adj.* }
DIS'MALLY, *adv.* } Lat *dies malus*, an evil
DIS'MALNESS, *n. s.* } day. Sorrowful; dire; horrid; melancholy; uncomfortable; unhappy; dark.

The thane of Cawder 'gan a *dismal* conflict.
Shakspeare.

He hears
On all sides from innumerable tongues
A *dismal* universal hiss. *Milton.*
Nor yet in horrid shade or *dismal* den,
Nor nocent yet; but on the grassy herb
Fearless, unfeared, he slept. *Id.*
The *dismal* situation waste and wild,
A dungeon horrible! *Id.*

Such a variety of *dismal* accidents must have broken the spirits of any man. *Clarendon.*

On the one hand set the most glittering temptations to discord, and on the other view the *dismal* effects of it. *Decay of Piety.*

Dreadful gleams,
Dismal screams. *Pope.*

DISMAL, GREAT, or DISMAL SWAMP, a large swamp, or bog, extending from north to south nearly thirty miles, and from east to west, at a medium, about ten miles, partly in Virginia and partly in North Carolina. No less than five navigable rivers, besides creeks, rise out of it; two of which run into Virginia, viz. the south branch of Elizabeth, and the south branch of Nansemond river, and three into North Carolina, namely, North River, NorthWest River, and Perquimons. All these hide their heads, properly speaking, in the Dismal, there being no signs of them above ground. There must, for this reason, be plentiful subterraneous stores of water here, or else the soil is so replete with this element, poured down from the high lands that surround it, that it can abundantly afford these supplies. This is, perhaps, most probable, as the ground of the swamp is a mere quagmire, trembling under the feet of those who walk upon it, and every footstep being instantly filled with water. The skirts of the swamp, towards the east, are overgrown with reeds, ten or twelve feet high, interspersed with strong bamboo briars. Among these grow

here and there a cypress or white cedar, commonly mistaken for the juniper. Towards the south end of it is a large tract of reeds, which, being constantly green and waving in the wind, is called the Green Sea. In many parts, especially on the borders, grows an ever-green shrub very plentifully, called the gall-bush. It bears a berry which dies a black color like the gall of an oak, whence its name. Near the middle of this swamp the trees grow much thicker, both cypress and cedar, and, being always green and loaded with very large tops, are much exposed to the wind and easily blown down. Neither beast, bird, insect, nor reptile, approach the heart of this horrible desert; perhaps deterred by the everlasting shade, occasioned by the thick shrubs and bushes, which the sun can never penetrate to warm the earth: nor indeed, on account of the noisome exhalations, do any birds fly over it. These noxious vapors infect the air all around. On the west border is a pine swamp, above a mile in breadth, great part of which is covered with water, knee-deep; the bottom, however, is firm, and the pines grow very tall. With all these disadvantages Dismal Swamp is, in many places, pleasing to the eye, though disagreeable to the other senses. It was judged impassable, till the line, dividing Virginia from North Carolina, was carried through it, in lat. 36° 28′ N., in 1728, by order of king George II. Although this was undertaken in a very dry season, the men who were employed were ten whole days before they could accomplish their work. In the middle is a lake about seven miles long, called Drummond's Pond, whose waters run south into Pasquotank River, which falls into Albemarle Sound; and on the north into Elizabeth and Nansemond Rivers, which fall into James River. A navigable canal has, with immense labor, been cut through this swamp, connecting the waters of the Pasquotank, which fall into Albemarle Sound, and those of the Elizabeth, which is connected by means of James River with Chesapeak Bay. As the Dismal Swamp lies so near Norfolk, where there is a constant demand for shingles, staves, &c., for exportation; and as the best of these articles are made from the trees growing upon the swamp, it is on this account a valuable property. It chiefly belongs to two companies, the Virginia Company, who possess 100,000 acres of it, and the North Carolina Company, who possess 40,000.

DISMAN'TLE, *v. a.* *Dis* and mantle. To deprive of a dress; to strip; to denude.

This is most strange!
That she, who even but now was your best object,
Dearest and best, should in this trice of time
Commit a thing so monstrous, to *dismantle*
So many folds of favour. *Shakspeare. King Lear.*

It is not sufficient to possess our own fort, without the *dismantling* and demolishing of our enemies. *Hukewill.*

His eyeballs, rooted out, are thrown to ground;
His nose *dismantled* in his mouth is found;
His jaws, cheeks, front, one undistinguished wound. *Dryden.*

He that makes his prince despised and undervalued and beats him out of his subjects' hearts, may easily strip him of his other garrisons, having already dispossessed him of his strongest, by *dismantling* him of his honour, and seizing his reputation. *South.*

Sees dancing slaves insult his martial plains
Parts with chill stream the dim religious bower
Time-mouldered bastion, and *dismantled* tower. *Darwin.*

DISMA'SK, *v. a.* *Dis* and mask. To divest of a mask; to uncover from concealment.

Fair ladies masked are roses in the bud,
Or angels veiled in clouds; are roses blown,
Dismasked, their damask sweet commixture shewn. *Shakspeare.*

The marquis thought best to *dismask* his beard; and told him that he was going covertly. *Wotton.*

DISMAY', *v. a.* & *n. s.* } Sp. *desmayer;* old Fr.
DISMAY'EDNESS, *n. s.* } *esmayer.* Minsheu after Sebastian, a Spanish etymologist, says, fancifully enough, 'from the moneth of Maye, for in that moneth the flowers of the field hang their heads and fade away:' to discourage; divert of self-possession; terribly.

He will not fail thee; fear not, neither be *dismayed*. *Deut.*

Nought could she say,
But suddeine catching hold, did her *dismay*
With quaking hands, and other signes of feare. *Spenser. Faerie Queene.*

Their mighty strokes their haberjeons *dismayed*. *Spenser.*

Enemies would not be so troublesome to the western coasts, nor that country itself would be so often *dismayed* with alarms as they have of late years been. *Raleigh's Essays.*

All sate mute,
Pondering the danger with deep thoughts; and each
In others countenance read his own *dismay*. *Milton.*

The valiantest feels inward *dismayedness* and yet the fearfullest is ashamed fully to shew it. *Sidney.*

Nothing can make him remiss in the practice of his duty; no prospect of interest can allure him, no fear of danger *dismay* him. *Atterbury.*

DI'SME, *n. s.* Fr. A tenth; the tenth part; tythe.

Since the first sword was drawn about this question,
Every tithe soul 'mongst many thousand *dismes*,
Hath been as dear as Helen. *Shakspeare. Troilus and Cressida.*

The pope began to exercise his new rapines by a compliance with king Edward, in granting him two years *disme* from the clergy. *Ayliffe's Parergon.*

DISMEM'BER, *v. a.* *Dis* and member. To divide member from member; to dilacerate; to cut in pieces.

Him booteth not resist, nor succour call,
His bleeding hart is in the venger's hand,
Who streight him rent in thousand pieces small,
And quite *dismembred* hath. *Spenser. Faerie Queene.*

I am with both, each army hath a hand;
And in their rage, I having hold of both,
They whirl asunder and *dismember* me. *Shakspeare.*

A state can never arrive to its period in a more deplorable crisis, than when some prince lies hovering, like a vulture, to devour or *dismember* its dying carcass. *Swift.*

Fowls obscene *dismembered* his remains,
And dogs had torn him on the naked plains. *Pope's Odyssey.*

Those who contemplate only the fragments or pieces of science dispersed in short unconnected discourses, can never survey an entire body of truth, but must always view it as deformed and *dismembered*.
Watts.

DISMISS', *v. a.* } Lat. *dimissus*. To send
DISMIS'SION, *n. s.* } away; despatch.

He *dismissed* the assembly. *Acts*, xix. 41.

We commit thee thither,
Until his army be *dismissed* from him.
Shakspeare. Henry IV.

You must not stay here longer; your *dismission*
Is come from Cæsar. *Id. Ant. and Cleop.*

Not only thou degrad'st them, or remit'st
To life obscure, which were a fair *dismission*;
But throw'st them lower than thou didst exalt them high. *Milton's Agonistes.*

If our young Iŭlus be no more,
Dismiss our navy from your friendly shore.
Dryden's Virgil.

Dismiss, as soon as may be, all angry and wrathful thoughts. These will but canker and corrode the mind, and dispose it to the worst temper in the world. *Mason.*

Puff not your cheeks, fond youths! *dismiss* the flute!
Hushed be the harp, the soft guitar be mute:
Such signs of passion in contempt I hold:—
But there's substantial proof of love—in gold.
Sheridan.

DISMISSION OF A BILL, in chancery. If the plaintiff does not attend on the day fixed for the hearing, his bill is dismissed with costs. It may be also dismissed for want of prosecution, which is in the nature of a nonsuit at law, if he suffers three terms to elapse without moving forwards in the cause.

DISMORT'GAGE, *v. a.* *Dis* and mortgage. To redeem from mortgage.

He *dismortgaged* the crown demesnes, and left behind a mass of gold. *Howel's Vocal Forest.*

DISMOUNT', *v. a.* & *v. n.* Fr. *demonter*. To throw off a horse, or from an elevation: to alight from a horse; to descend.

The champion stout
Eftsoones *dismounted* from his courser brave,
And to the dwarfe awhile his needless spere he gave.
Spenser. Faerie Queene.

From this flying steed unreined, as once
Bellerophon, though from a lower clime,
Dismounted, on the Aleian field I fall. *Milton.*

The Turks' artillery, planted against that tower, was by the Christian cannoneers *dismounted* with shot from the tower, and many of the gunners slain.
Knolles.

When he came within sight of that prodigious army at Agincourt, he ordered all his cavalry to *dismount*, and implore upon their knees a blessing.
Addison's Freeholder.

DISNA'TURALIZE, *v. a.* *Dis* and naturalize. To alienate; to make alien; to deprive of the privileges of birth.

DISNA'TURED, *adj.* *Dis* and nature. Unnatural; wanting natural tenderness; devoid of natural affection. Unusual.

If she must teem,
Create her child of spleen, that it may live,
And be a thwart *disnatured* torment to her.
Shakspeare. King Lear.

DISNEY (John), an English divine and magistrate, born at Lincoln, in 1677. He received the early part of his education at the grammar school in his native city, after which, his father being a dissenter, he was sent to an academy of that persuasion. From this he removed to the Middle Temple, where he studied the law, though he never followed it as a profession; but when he retired to his paternal estate, he distinguished himself greatly as an active magistrate, particularly in the laudable but unpopular measures he took for the suppression of vice and immorality, for which he repeatedly received the thanks of the judges on the circuits. When about forty-two years of age he took orders in the church, and was presented to the vicarage of Croft, and the rectory of Kirby-Super-Baine, in Lincolnshire. In 1722 he was preferred to the living of St. Mary, in Nottingham, where he died in 1730. He published, 1. Two Essays upon the Execution of the Laws against Immorality and Profaneness, 8vo. 2. Primitiæ Sacræ, the Reflections of a devout Solitude, 8vo. 3. Flora, prefixed to a Translation of Rapin's Poem on Gardens. 4. Remarks upon a Sermon preached by Dr. Sacheverell. 5. A View of ancient Laws against Immorality and Profaneness.

DISOBEY', *v. a.* } *Dis* and obey. To
DISOBE'DIENCE, *n. s.* } break commands, or
DISOBE'DIENT, *adj.* } transgress prohibitions;
DISOBE'DIENTLY, *adv.* } move out of order, or cease to follow a previous impulse.

The man of God was *disobedient* unto the word of the Lord. 1 *Kings* xiii. 26.

The offence is holy that she hath committed;
And this deceit loses the name of craft,
Of *disobedience*, or unduteous title.
Shakspeare.

Disobedient children, if preserved from the gallows, are reserved for the rack, to be tortured by their own posterity. One complaining, that never father had so undutiful a child as he had; Yes, said his sonne, with less grace than truth, my grandfather had.
Fuller.

Of man's first *disobedience*, and the fruit
Of that forbidden tree, sing heavenly muse.
Milton.

Murder, adultery, or *disobedience* to parents, have a general notion antecedently to laws. *Stillingfleet.*

She absolutely bade him, and he durst not know how to *disobey*. *Sidney.*

He's loth to *disobey* the god's command,
Not willing to forsake this pleasant land.
Denham.

This *disobedience* of the moon will prove
The sun's bright orb does not the planets move.
Blackmore.

This *disobedience* of the fibres of age to their usual stimuli, has generally been ascribed to repetition or habit, as those who live near a large clock, or a mill, or a waterfall, soon cease to attend to the perpetual noise of it in the day, and sleep during the night undisturbed. *Darwin.*

DISOBLIGE', *v. a.* } *Dis* and oblige.
DISOBLI'GING, *part. adj.* } To offend; disgust;
DISOBLI'GINGLY, *adv.* } give slight
DISOBLI'GINGNESS, *n. s.* } offence to. All
DISOBLIGA'TION. } the derivatives follow this sense.

Ashley had been removed from that charge, and was thereby so much *disobliged*, that he quitted the king's party. *Clarendon.*

There can be no malice, and consequently no crime or *disobligation*. *L'Estrange.*

Those, though in highest place, who slight and *disoblige* their friends, shall infallibly come to know the value of them, by having none when they shall most need them. *South.*

If a woman suffers her lover to see she is loth to *disoblige* him, let her beware of an encroacher. *Clarissa.*

My plan has given offence to some gentlemen, whom it would not be very safe to *disoblige*. *Addison's Guardian.*

We love and esteem our clergy, and are apt to lay some weight upon their opinion, and would not willingly *disoblige* them. *Swift concerning the Sacramental Test.*

Peremptoriness can befit no form of understanding: it renders wise men *disobliging* and troublesome, and fools ridiculous and contemptible. *Government of the Tongue.*

DISORB'ED, *adj.* *Dis* and orb. Thrown out of the proper orbit.

Fly like chidden Mercury from Jove,
Or like a star *disorbed*.
Shakspeare. Troilus and Cressida.

DISOR'DER, *v. a.* & *n. s.* } Fr. *desordre.*
DISOR'DERED, *adj.* } *Dis* and order. To
DISOR'DEREDNESS, *n, s.* } disturb; throw
DISOR'DERLY, *adv.* } out of arrangement; ruffle; discompose.

We behaved not ourselves *disorderly* among you. 2 *Thess.*

By that *disorderedness* of the soldiers, a great advantage was offered unto the enemy. *Knolles.*

Here do you keep a hundred knights and squires
Men so *disordered*, so debauched and bold,
That this our court, infected with their manners,
Shews like a riotous inn. *Shakspeare. King Lear.*

Naked savages fighting *disorderly* with stones, by appointment of their commanders, may truly and absolutely be said to war. *Raleigh.*

He is one that seldome takes care for old age, because ill diet and *disorder*, together with a consumption, or some worse disease, taken up in his full career, have onely chalked out his catastrophe but to a colon. *Micrologia*, 1629.

Eve,
Not so repulsed, with tears that ceased not flowing,
And tresses all *disordered*, at his feet
Fell humble. *Milton.*

Those obsolete laws of Henry I. were but *disorderly*, confused, and general things; rather cases and shells of administration than institutions. *Hale.*

Let him be stript, and *disordered*; I would fain see him walk in querpo, that the world may behold the inside of a friar. *Dryden's Span. Friar.*

Pleasure and pain are only different constitutions of the mind, sometimes occasioned by *disorder* in the body, or sometimes by thoughts in the mind. *Locke.*

A *disorderly* multitude contending with the body of the legislature, is like a man in a fit under the conduct of one in the fulness of his health and strength. *Addison.*

From vulgar bounds with brave *disorder* part,
And snatch a grace beyond the reach of art. *Pope.*

The incursions of the Goths, and other barbarous nations, *disordered* the affairs of the Roman empire. *Arbuthnot.*

Many a brave fellow, who has put his enemy to flight in the field, has been in the utmost *disorder* upon making a speech before a body of his friends at home. *Hughes.*

DISORD'INATE, *adj.* } *Dis* and ordinate.
DISORD'INATELY, *adv.* } Not living by rules of virtue; inordinate.

These not *disordinate*, yet causeless suffer
The punishment of dissolute days.
Milton. Agonistes.

DISO'RIENTATED, *adj.* *Dis* and orient. Turned from the east; turned from the right direction; thrown out of the proper place.

Andrew Marvel uses the word disoccidentated instead of *disorientated*: 'Geneva had disoccidentated our geographer.' *Dr. A. Rees.*

DISO'WN, *v. a.* *Dis* and own. To deny; not to allow; renounce.

Then they, who brother's better claim *disown*,
Expel their parents, and usurp the throne.
Dryden's Æneid.

When an author has publickly *disowned* a spurious piece, they have disputed his name with him. *Swift.*

DISOR'GANIZE, *v. a.* } Fr. *desorganiser*,
DISOR'GANIZATION, *n. s.* } *dis* and organize. To derange a system in its parts; subversion of system or order. A modern word altogether.

These *disorganizing* principles spread rapidly, and, had not the contagion been interrupted by the war with France, the consequences would have been far more serious to England. *Thomas.*

DISPA'ND, *v. a.* } Lat. *dispando*. To dis-
DISPA'NSION, *n. s.* } play; spread abroad; the act of displaying or spreading.

DISPAR'AGE, *v. a.* } Ital. *dispareggiare*,
DISPAR'AGER, *n. s.* } from Lat. *dispar*, un-
DISPAR'AGEMENT. } fit, and *agere*, to do; Minsheu. To match or compare for the worse; to depreciate by comparison; to treat contemptuously.

Gentle knight,
That doth against the dead his hand uprear,
His honour stains with rancour and despight,
And great *disparagement* makes to his former might.
Spenser.

Yet doe not sdeigne to let thy name be writt
In this base poem, for thee far unfitt;
Nought is thy worth *disparaged* thereby.
Id. Sonnets.

She was much affectionate to her own kindred, which did stir great envy in the lords of the king's side, who counted her blood a *disparagement* to be mingled with the king's. *Bacon.*

In a commonwealth, much *disparagement* is occasioned, when able spirits, attracted by a familiarity, are inflamed with faction. *Wotton.*

It is no *disparagement* for greater persons to begin treaties of peace. *Bp. Hall's Contemplations.*

Ahaz, his sottish conqueror, he drew
God's altar to *disparage* and displace,
For one of Syrian mode.
Milton's Paradise Lost.

They will defy
That which they love most tenderly;
Quarrel with minced pies, and *disparage*
Their best and dearest friend, plum-porridge.
Hudibras.

'Tis no *disparagement* to philosophy, that it cannot deify us. *Glanville.*

It is a hard and nice subject for a man to speak of himself; it grates his own heart to say any thing of *disparagement*, and the reader's ears to hear any thing of praise from him. *Cowley.*

You wrongfully do require Mopsa to so great a *disparagement*, as to wed her father's servant. *Sidney.*

The play was never intended for the stage; nor, without *disparagement* to the author, could have succeeded. *Dryden.*

Reason is a weak, diminutive light, compared to revelation, but it ought to be no *disparagement* to a star that it is not a sun. *South.*

His religion sat easily, naturally, and gracefully upon him, without any of those forbidding appearances which sometimes *disparage* the actions of men sincerely pious. *Atterbury.*

DISPA'RATES, *n. s.* } From Lat. *disparata.*
DISPA'RITY, *n. s.* } Things so unlike that they cannot be compared with each other; inequality.

Between Elihu and the rest of Job's familiars, the greatest *disparity* was but in years. *Hooker.*

Among unequals, what society
Can sort, what harmony or true delight?
Which must be mutual, in proportion due
Given and received; but in *disparity*,
The one intense, the other still remiss,
Cannot well suit with either, but soon prove
Tedious alike. *Milton.*

There was as great a *disparity* between the practical dictates of the understanding, then and now, as there is between empire and advice, counsel and command. *South.*

Men ought not to associate and join themselves together in the same office, under a *disparity* of condition. *Ayliffe's Parergon.*

DISPARK', *v. a.* *Dis* and park. To throw open a park.

To set at large; to release from enclosure.

You have fed upon my signiories,
Disparked my parks, and felled my forest woods.
Shakspeare.

They were supposed
By narrow wits to be enclosed;
Till his free muse threw down the pale,
And did at once *dispark* them all. *Waller.*

DISPART', *v. a.* *Dis* and part. Fr. *departir*; Lat. *dispertior*. To divide in two; to separate; to break; to burst; to rive.

Hard is the doubt, and difficult to deem,
When all three kinds of love together meet,
And do *dispart* the heart with power extreme,
Whether shall weigh the balance down.
Spenser.

The rest to several places
Disparted, and between spun out the air.
Milton.

Disparted Britain mourned their doubtful sway,
And dreaded both, when neither would obey.
Prior.

The pilgrim oft,
At dead of night, mid his oraison hears
Aghast the voice of Time, *disparting* towers,
Tumbling all precipitate down-dashed,
Rattling around, loud thunderin to the moon.
Dyer.

DISPART, in gunnery, is the mark set upon the muzzle ring of a piece of ordnance, so that a sight-line, taken upon the top of the base ring, against the touch-hole, by the mark set on or near the muzzle, may be parallel to the axis of the concave cylinder. The common way of doing this is, to take the two diameters of the base-ring, and of the place where the dispart is to stand, and divide the difference between them into two equal parts, one of which will be the length of the dispart, which is set on the gun with wax or pitch, or fastened there with a piece of twine or marline. By means of an instrument it may be done with great nicety.

DISPA'SSION, *n. s.* } From *dis* and pas-
DISPA'SSIONATE, *adj.* } sion. Freedom from
DISPA'SSIONATED, *adj.* } mental perturbation; exemption from passion.

Wise and *dispassionate* men thought he had been proceeded with very justly. *Clarendon.*

What is called by the Stoicks apathy, or *dispassion*, is called by the Scepticks indisturbance, by the Molinists quietism, by common men peace of conscience. *Temple.*

You have, as all *dispassionated* men may judge, fulfilled the poet's definition of madness. *Dr. Maine.*

DISPEL', *v. a.* Lat. *dispello*. To drive by scattering; to dissipate.

If the night
Have gathered aught of evil, or concealed,
Disperse it, as now light *dispels* the dark.
Milton.

When the spirit brings light unto our minds, it *dispels* darkness; we see it, as we do that of the sun at noon, and need not the twilight of reason to shew it. *Locke.*

DISPENCE', *n. s.* Fr. *dispence*. Expense; cost; charge; profusion.

It was a vault ybuilt for great *dispence*,
With many ranges reared along the wall,
And one great chimney, whose long funnel thence
The smoke forth threw. *Faerie Queene.*

DISPEND', *v. a.* Lat. *dispendo*. To spend; to consume: to expend.

Of their commodities they were now scarce able to *dispend* the third part. *Spenser's State of Ireland.*

DISPENSE', *v. a.* & *n. s.* } Fr. *dispenser*;
DISPENS'ARY, *n. s.* } Span. *despensar*;
DISPENSA'TION, } Ital. and Lat. *dispensare*, from *dis*,
DISPENSA'TOR, } diversely, and
DISPEN'SATORY. } *pendo*, to weigh out money. To deal out; distribute by rule or measure: hence to excuse, or suspend compliance with a rule; and to set free from obligation. A dispensary is, strictly, a place where medicines are weighed or dealt out; a dispensatory a book prescribing them; dispensation, a rule of dealing between God and man; distribution: hence, permission to do what may have been forbidden.

So a man gesse us as mynystris of Crist, and *dispenderis* of the mynysteries of God. Now it is sought among the *dispenderis* that a man be foundun trwve. *Wiclif.* i. *Cor.* 4.

One loving howre
For many years of sorrow can *dispence*.
Spenser. Faerie Queene.

Hast thou not sworn allegiance unto me?
Canst thou *dispense with* heaven for such an oath?
Shakspeare.

How few kingdoms are there, wherein, by *dispensing with* oaths, absolving subjects from allegiance, and cursing, or threatening to curse, as long as their curses were regarded, the popes have not wrought innumerable mischiefs. *Raleigh.*

As her majesty hath made them *dispensators* of her favour towards her people, so it behoveth them to shew themselves equal distributers of the same. *Bacon.*

The description of the ointment is found in the chymical *dispensatory*. *Id. Natural History.*

God delights in the ministries of his own choice, and the methods of grace, in the economy of heaven, and the *dispensations* of eternal happiness.
Taylor's Worthy Communicant.

Royal bounties
Are great and gracious, while they are *dispensed*
With moderation. *Massinger.*

Those now that were *dispensed*
The burden of many ages, on me light
At once by my foreknowledge. *Milton.*

Then reliques, beads,
Indulgences, *dispenses*, pardons, bulls,
The sport of winds. *Id.*

At length the muses stand restored again,
While you *dispense* the laws, and guide the state.
Dryden.

To thee the loved *dispensary* I resign. *Garth.*

Neither are God's methods or intentions different in his *dispensations* to each private man. *Rogers.*

Do thou, my soul, the destined period wait,
When God shall solve the dark decrees of fate;
His now unequal *dispensations* clear,
And make all wise and beautiful appear. *Tickell.*

Our materia medica is large enough; and, to look into our *dispensatories*, one would think no disease incurable. *Baker.*

A *dispensation* was obtained to enable Dr. Barrow to marry. *Ward.*

I could not *dispense with* myself from making a voyage to Caprea. *Addison on Italy.*

Those to whom Christ has committed the *dispensing* of his gospel. *Decay of Piety.*

This perpetual circulation is constantly promoted by a *dispensation* of water promiscuously and indifferently to all parts of the earth.
Woodward's Natural History.

Those who stand before earthly princes, who are the *dispensers* of their favours, and conveyors of their will to others, challenge high honours. *Atterbury.*

His peculiar doctrines are not like any thing of human contrivance. 'Never man spake like this man.' One of the first names given to that *dispensation* of things which he came to introduce, was 'the kingdom,' or the reign, 'of heaven.' *Beattie.*

DISPENSARY, a kind of charitable institution, of late years very prevalent in Britain. They are designated the General Dispensary, the Universal Dispensary, the Dispensary of particular counties or districts, &c. They are supported by voluntary subscriptions, having each one or more physicians and surgeons, whose business is to attend at stated times, to prescribe for the poor; and, if necessary, to visit them at their own habitations. It is in this latter respect, that the patients of a dispensary differ from those called out-patients at an hospital. The poor are supplied gratis with medicine, and many of these institutions also afford gratuitous assistance to lying-in women. Formerly there were three dispensaries established in London, for selling medicines to the poor at prime cost, under the direction of the College of Physicians. In China the medicines are not dispensed gratis, but money is given to the poor to purchase them. The Chinese have a stone, ten cubits high, erected in the public squares of their cities: on this stone are engraved the names of all sorts of medicines, with the price of each; and when the poor stand in need of any relief from physic, they go to the treasury, where they receive the price each medicine is rated at.

DISPENSATIONS are most generally dispensed by the pope, who claims the office jure divino, and has extended it to every thing. See INDULGENCES. His power to grant a dispensation for any thing contrary to the divine law, or the law of nature, has, however, been denied by the more moderate of the Romanists, who confine him to what is contrary to positive laws, or to things relating to facts, marriages, holding several benefices, &c.; and who limit him even in these things. The archbishop of Canterbury has a power, by statute, of dispensing in any cause wherein dispensations were formerly granted by the see of Rome, as well to the king as his subjects; and, during the vacancy of the archbishop's see, the guardian of the spiritualities may grant dispensations. Every bishop of common right has the power of instituting to benefices, and of dispensing in common cases, &c. A dispensation of the king makes a thing prohibited, lawful to be done by the person that has it, though a thing evil in itself will not admit of a dispensation. And where the subject has an immediate interest in an act of parliament, the king cannot dispense with it; but may, if the suit be the king's own, only for the breach of a penal law that is not to the damage of a third person. There is a dispensation by non obstante, which is where a statute tends to restrain some prerogative incident to the person of the king, as the right of pardoning, or commanding the service of the subjects for the benefit of the public, &c., each of which prerogatives is inseparable from the king, and therefore, by a clause non obstante, such statute may be dispensed with.

DISPE'OPLE, *v. a.* } *Dis* and people. To
DISPE'OPLER, *n. s.* } depopulate; to empty of people: he who depopulates, or wastes.

The Irish, banished into the mountains, where they lived only upon white meats, seeing their lands so *dispeopled* and weakened, came down into the plains. *Spenser.*

Conflagrations and great droughts, do not merely *dispeople*, but destroy. *Bacon.*

His heart exalts him in the harm
Already done, to have *dispeopled* heaven. *Milton.*

Nor drain I ponds the golden carp to take;
Nor trowle for pikes, *dispeoplers* of the lake. *Gay.*

Kings, furious and severe,
Who claimed the skies, *dispeopled* air and floods,
The lonely lords of empty wilds and woods. *Pope.*

DISPE'RGE, *v. a.* Lat. *dispergo*. To sprinkle; to scatter.

DISPERSE', *v. a.* DISPERS'EDLY, *adv.* DISPERSE'DNESS, *n. s.* DISPERSE'R, DISPERS'ION. } Fr. *disperser*, from Lat. *dispergere*, *dispersus*; *à dis*, diversely, and *spargo*; Gr. σπαραγω, to sprinkle. To scatter; dissipate into parts; distribute.

And I scattered them among the heathen, and they were *dispersed* through the countries. *Ezek.* xxxvi. 19.

The exquisite wits of some few, peradventure, are able, *dispersedly* here and there, to find now a word, and then a sentence, which may be more probably suspected, than easily cleared of errour. *Hooker.*

Soldiers, *disperse* yourselves. *Shakspeare.*

Noah began from thence his *dispersion*. *Raleigh.*

Being a king that loved wealth, he could not endure to have trade sick, nor any obstruction to continue in the gate vein which *disperseth* that blood. *Bacon.*

Dispersed love grows weak, and fewness of objects useth to unite affection. *Bp. Hall's Contemplations.*

If the night
Have gathered aught of evil, or concealed,
Disperse it, as now light dispels the dark. *Milton.*

The torrid parts of Africk are by Piso resembled to a libbard's skin, the distance of whose spots represent the *dispersedness* of habitations or towns in Africk.
Brerewood on Languages.

Those who are pleased with defamatory libels, so far as to approve the authors and *dispersers* of them, are as guilty as if they had composed them.
Spectator.

After so many *dispersions*, and so many divisions, two or three of us may yet be gathered together.
Pope.

Those minerals are either found in grains, *dispersedly* intermixed with the corpuscles of earth or sand, or else amassed into balls or nodules. *Woodward.*

They have built
More Babels without new *dispersion*, than
The stammering young ones of the flood's dull ooze,
Who failed and fled each other. *Byron.*

DISPERSION OF INFLAMMATION, in medicine and surgery, is the removing the inflammation, and restoring the inflamed part to its natural state

The DISPERSION OF MANKIND, in the early history of the world, was occasioned by the confusion of tongues, and took place in consequence of the overthrow of Babel at the birth of Peleg; whence he derived his name. It appears by the account given of his ancestors, Gen. xi. 10—16, to have happened in the 101st. year after the flood, according to the Hebrew chronology, and by the Samaritan computation in the 401st. However, various difficulties have been suggested by chronologers concerning the true era of this event. Sir John Marsham and others, to reconcile the Hebrew and Egyptian chronologies, maintain a dispersion of mankind before the birth of Peleg. Others, unable to find numbers sufficient for the plantations of colonies in the space of 101 years, according to the Hebrew computation, fix the dispersion towards the end of Peleg's life, thus following the computation of the Jews. Petavius assigns the 153d year after the flood: Cumberland the 180th; and Usher, though he generally refers it to the time of Peleg's birth, in one place assigns the 131st after the flood for this event. Mr. Shuckford supposes the dispersion to have been gradual, and to have commenced with the separation of some companies at the birth of Peleg, and to have been completed thirty-one years after. According to the calculation of Petavius, the number of inhabitants on the earth at the birth of Peleg amounted to 32,768. Cumberland makes them 30,000. Mr. Mede states them at 7,000 men, besides women and children: and Mr. Whiston, who supposes that mankind now double themselves in 400 years, and that they doubled themselves, between the deluge and the time of David, in sixty years at a medium, when their lives were six or seven times as long as they have been since, by his computation, produces about 2,389; a number much too inconsiderable for the purposes of separating and forming distinct nations. This difficulty induced Mr. Whiston to reject the Hebrew, and to adopt the Samaritan chronology, as many others have done; which, by allowing an interval of 401 years between the flood and the birth of Peleg, furnishes, by the last mentioned mode of computation, more than 240,000 persons. As to the manner of the dispersion of the posterity of Noah from the plain of Shinar, the sacred historian informs us that they were divided in their lands, every one according to his tongue, according to his family, and according to his nation. Gen. x. 5. 20. 31: and thus, as Mr. Mede observes, they were ranged according to their nations, and every nation by its families; so that each nation had a separate lot, and each family in every nation. The following abstract will serve to give a general idea of their respective settlements:—Japhet, Noah's eldest son, had seven sons, viz. Gomer, whose descendants inhabited those parts of Asia which lie upon the Ægean Sea and Hellespont northward, containing Phrygia, Pontus, Bithynia, and a great part of Galatia. The Galatians, according to Josephus, were called Gomeræi; and the Cimmerii, according to Herodotus, occupied this tract of country: and from these Gomerians, Cimmerii, or Celts, Mr. Camden derives our ancient Britons, who still retain the name Cymro, Cymru, or Cumbri. See BRITAIN. Magog, the second son of Japhet, was probably the father of the Scythians on the east and north-east of the Euxine Sea. Madai planted Media, though Mr. Mede assigns Macedonia to his share. Javan was the father of the Grecians about Ionia, whose country lies along the Mediterranean Sea; the radicals of Javan and Ionia being the same, יון. To Tubal and Meshech belonged Cappadocia and the country which lies on the borders of the Euxine Sea; and from them, migrating over the Caucasus, it is supposed the Russians and Muscovites are descended. And Tiras occupied Thrace. The sons of Shem were five; Elam, whose country lay between the Medes and Mesopotamians, and was called by the Gentile writers Elymais; and Josephus calls the Elamites the founders of the Persians; Ashur, who was driven out of Shinar by Nimrod, afterwards settled in Assyria, and there built Nineveh and other cities; Arphaxad, who gave name to the country which Ptolemy calls Arraphacitis, a province of Assyria, though Josephus makes him the father of the Chaldees, Lud, who inhabited and gave name to the country of Lydia about the river Mæander, remarkable for its windings, in Asia Minor; and Aram,

the father of the Syrians. Ham, the youngest son of Noah, had four sons, viz. Cush, whose posterity spread into the several parts of Arabia, over the borders of the land of Edom, into Arabia Felix, up to Midian and Egypt; Mizraim, the father of them who inhabited Egypt and other parts of Africa; Phut, to whom Bochart assigns the remaining part of Africa, from the lake Tritonides to the Atlantic Ocean, called Lybia; and Canaan, to whom belonged the land of Canaan, whence the Phœnicians derived their origin. Dr. Bryant has advanced a new hypothesis on this subject, and supported it with his usual acuteness and learning. He maintains that the dispersion, as well as the confusion of tongues, was local, and limited to the inhabitants of the province of Babel; that the separation and distribution recorded to have taken place in the days of Peleg, Gen. x. 25, 31, 32, which was the result of Divine appointment, occasioned a general migration; and that all the families among the sons of men were concerned in it. The house of Shem, from which the Messiah was to spring, was particularly regarded in this distribution; the portion of his children was near the place of separation; they in general had Asia to their lot, as Japhet had Europe, and Ham the large continent of Africa. But the sons of Cush would not submit to the divine dispensation; they went off under the conduct of Nimrod, and seem to have been for a long time in a roving state. They, however, at last arrived at the plains of Shinar; and having ejected Ashur and his sons, seized his dominions, and laid there the foundation of a great monarchy. But afterwards, fearing lest they should be divided and scattered abroad, they built the tower of Babel as a land mark to which they might repair; and probably to answer the purposes of an idolatrous temple, or high altar, dedicated to the host of heaven. Here they were punished with the judgment of confounded speech through a failure in labial utterance, and with the dispersion recorded in Gen. x. 8, 9: in consequence of which they were scattered abroad from this city and tower, without any certain place of destination.

'Various, however,' as Dr. Kippis remarks, 'have been the opinions concerning the confusion of tongues at Babel. Some have thought that the change produced by it was of so total a nature, as to oblige men to speak in languages fundamentally different. But this is not probable, as, in that case, the whole set of their ideas, and the very organs of their speech, must have been altered. Neither is this hypothesis agreeable to experience, since most of the languages we are acquainted with have a certain degree of affinity. They either appear to be materially related, as sister languages, or show that they were originally derived from the same source.

'Other persons therefore, with greater reason, suppose that the change was only partial, and brought about in a gradual manner. Dr. Gr. Sharpe is of opinion, that the confounding of the speech, or lip, does not relate to language, properly so called, but to a confusion of design, counsels, and purposes; so that the builders of Babel could not agree together, to carry on the undertaking they had begun.'

This last writer fairly enough observes—'The number of people at Babel before the dispersion is not known, and of the miraculous division of languages there is not one word in the Bible. In Psalm lv. 9, David says, 'Destroy, O Lord, and divide their tongues, for I have seen violence and strife in the city;' where he certainly does not mean that God would make them speak new languages: for to divide their tongues is to divide their counsels, and to scatter dissension and animosity, not new-made words, amongst them. However, in Genesis xi. their language is not even said to be divided; but God says, 'Let us go down and confound their language, that they may not understand one another's speech. So the Lord scattered them abroad from thence upon the face of all the earth, and they left off to build the city. Therefore is the name of it called Babel (or confusion), because the Lord did there confound the language of all the earth.'

He thus concludes—'It is said that they (the whole earth) were together in the plain of Shinar, and that the language of all the earth was there confounded. No person is excepted. However, it is not presumed that Noah consented to the building, much less that he assisted in the work, or that he was ignorant that men were to be dispersed, and the world peopled by their dispersion, or that he did not oppose the raising an edifice to prevent their dispersion, which, from the natural increase of men and cattle, must in time have happened without a miracle. But it is apprehended, that there could be no occasion for a lofty fortress to defend the whole earth; for what enemies had the whole earth, against whom it was necessary to build a high tower? There is a like difficulty in assigning any reason for making themselves men of name or renown; for who were to esteem them men of name or of renown? Or where and when where they to be famous, before there were any human inhabitants but themselves?'

The Cushites seem afterwards to have invaded Egypt or the land of Mizraim in its infant state, seized the whole country, and held it for some ages in subjection: they extended themselves likewise to the Indies and Ganges, and still farther into China and Japan. From them the province of Cushan or Goshen in Egypt probably derived its name. Here they also obtained the appellation of 'royal shepherds;' and when they were by force driven out of the country, after having been in possession of it for 260 or 280 years, the land which they had been obliged to quit was given to the Israelites, who were also denominated shepherds, but should not be confounded with the former or the antecedent inhabitants of Goshen. See EGYPT.

DISPERSION, POINT OF, in dioptrics, the point from which refracted rays begin to diverge, where their refraction renders them divergent.

DISPI'RIT, *v. a.* } *Dis* and spirit. To
DISPI'RITEDNESS, *n. s.* } discourage; deject; depress; intimidate; exhaust.

Certain it is, that the poor man appeared so *dispirited*, that he spoke but few words after he came upon the scaffold. *Clarendon.*

The providence of God strikes not in with them,

but dashes, and even *dispirits*, all their endeavours, and makes their designs heartless and ineffectual. *South.*

Steady to my principles, and not *dispirited* with my afflictions, I have overcome all difficulties. *Dryden.*

Amidst all the honours that are paid him, he feels nothing in himself but a poor, weak, *dispirited* mortal, yielding to the laws of corruption. *Rogers.*

He has *dispirited* himself by a debauch, and drank away his good humour. *Collier.*

I cannot bring myself to believe that the King was either the first projector or the principal actor in the sorry farce of neglecting a man whom they could not dishonour, of distressing a man whom they could not *dispirit*, which has been playing at Court for near twenty-six years. *Bp. Watson.*

DISPIT'EOUS, *adj.* *Dis* and piteous. Unpitying.

The Knight of the Red Crosse, when him he spide,
Spurring shote with rage *dispiteous*,
Gan fairely couch his speare.
Spenser. Faerie Queene.

DISPLA'CE, *v. a.* *Dis* and place. To put out of place, state, office, or trust.

You have *displaced* the mirth, broke the good meeting,
With most admired disorder. *Shakspeare.*

One then may be *displaced*, and one may reign;
And want of merit render birthright vain. *Dryden.*

A religion, established by God himself, should not be *displaced* by any thing, under a demonstration of that divine power that first introduced it. *South.*

Whose arch or pillar meets me in the face,
Titus or Trajan's? No—'tis that of Time:
Triumph, arch, pillar, all he doth *displace*
Scoffing; and apostolic statues climb
To crush the imperial urn, whose ashes slept sublime.
Byron.

DISPLA'CENCY, *n. s.* Lat. *displicentia* Incivility; any thing unpleasing.

The *displacencies* that he receives, by the consequences of his excess, far outweigh all that is grateful in it. *Decay of Piety.*

DISPLANT', *v. a.* } *Dis* and plant. To
DISPLANT'ATION, *n. s.* } remove a plant; hence to drive a people from their place of residence.

All those countries, which, lying near unto any mountains, or Irish desarts, had been planted with English, were shortly *displanted* and lost. *Spenser.*

I may justly account new plantations to be the children of former kingdoms: I like a plantation in a pure soil; that is, where people are not *displanted*. *Bacon.*

The Edenites were garrisoned to resist the Assyrians, whose *displantation* Senacherib vaunted of. *Raleigh.*

DISPLAY', *v. a.* & *n. s.* Fr. *déployer*, from Lat. *dis* (privative) and *plico*, to fold. To unfold; to exhibit, spread open to view.

His glistring armor made
A little gloomy light, much like a shade,
By which he saw the ugly monster plaine,
Halfe like a serpent horribly *displaide*.
Spenser. Faerie Queene.

You speak not like yourself, who ever yet
Have stood to charity, and *displayed* the effects
Of disposition gentle. *Shakspeare.*

Our enobled understandings take the wings of the morning to visit the world above us, and have a glorious *display* of the highest form of created excellencies. *Glanville.*

Thou heaven's alternate beauty can'st *display*,
The blush of morning, and the milky way.
Dryden.

The works of nature, and the words of revelation, *display* truth to mankind in characters so visible, that those who are not quite blind, may read. *Locke.*

It is a noble and great thing to cover the blemishes and to excuse the failings of a friend; to draw a curtain before his stains, and to *display* his perfections. *South.*

He carves, *displays*, and cuts up to a wonder. *Spectator.*

So the gay lady, with expensive care,
Borrows the pride of land, of sea and air;
Furs, pearls, and plumes, the glittering thing *displays*,
Dazzles our eyes, and easy hearts betrays. *Gay.*

The storm the dark Lycæan groves *displayed*,
And first to light exposed the sacred shade.
Pope's Statius.

DISPLEA'SANCE, *n. s.* }
DISPLEA'SE, *v. a.* & *n. s.* }
DISPLEA'SING, *n. s.* } *Dis* and please. To offend; make angry or sad: as a neuter verb, to disgust; make averse.
DISPLEA'SINGNESS, *n. s.* }
DISPLEA'SURE, *v. a.* & *n. s.* }

Displeasingness is the quality of giving offence; displeasure the offence given.

God was *displeased* with this thing. 1 *Chron.* xxi. 7.

Cordell said, she loved him as behoved:
Whose simple answer, wanting colours fair
To paint it forth, him to *displeasance* moved.
Faerie Queene.

True repentance may be wrought in the hearts of such as fear God, and yet incur his *displeasure*, the deserved effect whereof is eternal death. *Hooker.*

He should beware that he did not provoke Soliman's heavy *displeasure* against him. *Knolles.*

Oft our *displeasures*, to ourselves unjust,
Destroy our friends, and after weep their dust.
Shakspeare.

When the way of pleasuring or *displeasuring* lieth by the favourite, it is impossible any other should be over great. *Bacon.*

Undoubtedly he will relent, and turn
From his *displeasure*. *Milton.*

What to one is a most grateful odour, to another is noxious and *displeasant*; and it were a misery to some to lie stretched on a bed of roses. *Glan. Scepsis.*

It is a mistake to think that men cannot change their *displeasingness* or indifferency, that is in actions, into pleasure and desire, if they will do but what is in their power. *Locke.*

On me alone thy just *displeasure* lay;
But take thy judgments from this mourning land.
Dryden.

Nothing is in itself so pernicious to communities of earned men, as the *displeasure* of their prince. *Addison's Freeholder.*

DISPLODE', *v. a.* } Lat. *displodo*. To dis-
DISPLO'SION, *n. s.* } perse with a loud noise; to vent with violence: a sudden bursting forth.

Stood ranked of seraphim another row,
In posture to *displode* their second tire
Of thunde *Milton.*

DISPORT', *v. n.* & *n. s.* *Dis* and sport. To play; sport: pastime; diversion; amusement.

She list not hear, but her *disports* pursued;
And ever bade him stay, till time the tide renewed.
Spenser.

He often, but attended with weak guard,
Comes hunting this way to *disport* himself.
Shakspeare.

His *disports* were ingenuous and manlike, whereby he always learned somewhat.
Hayward on Edward VI.

Fresh gales and gentle airs
Whispered it to the woods, and from their wings
Flung rose, flung odours, from the spicy shrub
Disporting! *Milton.*

Loose to the winds their airy garments flew;
The glittering textures of the filmy dew
Dipt in the richest tincture of the skies,
Where light *disports* in ever mingling dyes. *Pope.*

DISPOSE', *v. a., v. n., & n. s.* Fr. *disposer;*
DISPOS'ER, *n. s.* Ital. *disporre;*
DISPOSI'TION, Span. and Port,
DISPOS'ITIVE, *adj.* *disponer;* Lat.
DISPOS'ITIVELY, *adv.* *disponere*, from
DISPO'SURE, *n. s.* *dis* and *pono*, *posui*, to place, *à* Gr. *πονω*, to labour. To employ; place; order; give an impulse; taking *to*: to make fit; taking *for*; to transfer, put away, conduct: as a neuter verb, to make terms or a bargain: as a substantive, it signifies power; right or management; taking *at* or *to*; distributive: dispositive is distributive. The other substantives follow the verb, dispose, in their meaning.

The tabernacle of witnessyng was with oure fadris in desert as god *disposide* to hem and spak to moises, that he schulde make it aftir the fourme that he saigh.
Wiclif. Dedis. vii.

The lot is cast into the lap; but the whole *disposing thereof* is of the Lord. *Proverbs.*

These when the knights beheld, they 'gan *dispose*
Themselves to court, and each a damsel chose.
Spenser.

But if thee list unto the court to throng,
And there to haunt after the hoped prey,
Then must thou thee *dispose* another way.
Hubberd's Tale.

Touching musical harmony, whether by instrument or voice, it being of high and low, in due proportionable *disposition*, such notwithstanding is the force thereof, and so very pleasing effects it hath, in that very part of man which is most divine, that some have been thereby induced to think, that the soul itself by nature is, or hath in it, harmony. *Hooker.*

As she is mine, I may *dispose of* her:
Which shall be either to this gentleman,
Or to her death. *Shakspeare.*

When she saw you did suspect
She had *disposed* with Cæsar, and that your rage
Would not be purged, she sent word she was dead.
Id.

I have suffered more for their sakes, more than the villanous inconstancy of man's *disposition* is able to bear. *Id.*

He carries on the stream of his *dispose*
Without observance or respect of any,
In will peculiar. *Id. Troilus and Cressida.*

I crave fit *disposition* for my wife,
Due reference of place and exhibition,
As levels with her breeding. *Id. Othello.*

Suspicions *dispose* kings to tyranny, husbands to jealousy, and wise men to irresolution and melancholy.
Bacon.

They must receive instructions how to *dispose of* themselves when they come, which must be in the nature of laws unto them. *Id. to Villiers.*

They remained in a kind of warlike *disposure*, or perhaps little better. *Wotton.*

Whilst they murmur against the present *disposure* of things, they do tacitly desire in them a difformity from the primitive rule, and the idea of that mind that formed all things best.
Browne's Vulgar Errours.

That axiom in philosophy, that the generation of one thing is the corruption of another, although it be substantially true, concerning the form and matter, is also *dispositively* verified in the efficient or producer.
Id.

How sweetly doth God *dispose* of all second causes, that, while they do their own will, they do his!
Bp. Hall. Contemplations.

Tax not divine *disposal*; wisest men
Have erred, and by bad women been deluded.
Milton.

All is best, though oft we doubt
What the' unsearchable *dispose*
Of highest wisdom brings about,
And ever best found in the close.
Milton. Agonistes.

He knew the seat of Paradise;
And, as he was *disposed*, could prove it
Below the moon, or else above it. *Hudibras.*

The memory of what they had suffered, by being without it, easily *disposed* them to do this.
Clarendon.

I think myself obliged, whatever my private apprehensions may be of the success, to do my duty, and leave events to their *disposer*. *Boyle.*

Would I had been *disposer* of thy stars,
Thou shouldst have had thy wish, and died in wars.
Dryden.

Of all your goodness leaves *to* our *dispose*,
Our liberty's the only gift we chuse.
Id. Indian Emperor.

Under this head of invention is placed the *disposition* of the work, to put all things in a beautiful order and harmony, that the whole may be of a piece.
Id. Dufresnoy, Preface.

In his *disposure* is the orb of earth,
The throne of kings, and all of human birth.
Sandys.

This may *dispose* me, perhaps, *for* the reception of truth; but helps me not to it. *Locke.*

We shall get more true and real knowledge by one rule, than by taking up principles, and thereby putting our minds into the *disposals* of others. *Id.*

Disposition is when the power and ability of doing any thing is forward, and ready upon every occasion to break into action. *Id.*

All the reason of mankind cannot suggest any solid ground of satisfaction, but in making that God our friend, who is the absolute *disposer* of all things.
South.

Although the frequency of prayer and fasting may be of no efficacy to *dispose* God to be more gracious, yet it is of great use to *dispose* us to be more objects of his grace. *Smalridge.*

They require more water than can be found, and more than can be *disposed of*, if it was found. *Burnet.*

Of what you gathered, as most your own, you have *disposed* much in works of public piety.
Spratt.

Thus, whilst she did her various power *dispose*,
The world was free from tyrants, wars, and woes.
Prior.

I have *disposed of* her to a man of business, who will let her see, that to be well dressed, in good

humour, and chearful in her family, are the arts and sciences of female life. *Tatler.*

If mere moralists find themselves *disposed to* pride, lust, intemperance, or avarice, they do not think their morality concerned to check them. *Swift.*

I take myself to be as well informed as most men in the *dispositions* of each people towards the other. *Id.*

Refrangibility of the rays of light is their *disposition* to be refracted, or turned out of their way, in passing out of one transparent body or medium into another. *Newton.*

Are not the blessings both of this world and the next in his *disposal?* *Atterbury.*

The love we bear to our friends is generally caused by our finding the same *disposition* in them which we feel in ourselves. *Pope.*

Bleeding is to be used or omitted according to the symptoms which affect the brain; it relieves in any inflammatory *disposition* of the coat of the nerve. *Arbuthnot on Diet.*

There is a sort of masonry in poetry, wherein the pause represents the joints of a building, which ought in every line and course to have their *disposition* varied. *Shenstone.*

Under his fatherly rebukes then let us be ever humble and submissive. Such now is the true filial *disposition.* *Mason.*

DISPOSSE'SS, *v. a.* *Dis* and possess. To put out of possession; to deprive; to disseize.

The children went to Gilead, and took it, and *dispossessed* the Amorite which was in it. *Numbers* xxxii. 39.

The blow from saddle forced him to fly;
Else might it needs down to his manly breast
Have cleft his head in twain, and life thence *dispossest.*
Spenser. Faerie Queene.

I will chuse
Mine heir from forth the beggars of the world,
And *dispossess* her all. *Shakspeare. Timon.*

Let us sit upon the ground, and tell
How some have been deposed, some slain in war,
Some haunted by the ghosts they *dispossessed.*
Id. Richard II.

In thee I hope; thy succours I invoke,
To win the crown whence I am *dispossessed;*
For like renown awaiteth on the stroke,
To cast the haughty down, or raise the' oppressed.
Fairfax.

They arrogate dominion undeserved
Over their brethren, and quite *dispossess*
Concord and law of nature *from* the earth.
Milton.

This inaccessible high strength, the seat
Of Deity supreme, us *dispossessed,*
He trusted to have seized. *Id.*

No power shall *dispossess*
My thoughts *of* that expected happiness.
Denham.

O fairest of all creatures, last and best
Of what heaven made, how art thou *dispossessed*
Of all thy native glories!
Dryden. State of Innocence.

Nothing can create more trouble to a man than to endeavour to *dispossess* him *of* this conceit. *Tillotson.*

It will be found a work of no small difficulty to *dispossess* and throw out a vice *from* that heart, where long possession begins to plead prescription. *South.*

DISPRA'ISE, *v. a.*, & *n. s.* } *Dis* and praise.
DISPRAIS'ER, *n. s.* } To blame; censure; dishonor:
DISPRA'ISIBLE, *adj.* } one who blames
DISPRAI'SINGLY, *adv.* } another: dispraisible is, unworthy of commendation.

In praising Antony, I've *dispraised* Cæsar. *Shakspeare.*

If I can do it
By aught that I can speak in his *dispraise,*
She shall not long continue love to him. *Id.*
Michael Cassio!
That came a wooing with you: many a time,
When I have spoke of you *dispraisingly,*
Hath ta'en your part. *Id. Othello.*

Nothing is here for tears, nothing to wail
Or knock the breasts; no weakness; no contempt,
Dispraise, or blame. *Milton's Agonistes.*

I need not raise
Trophies to thee from other men's *dispraise.*
Denham.

Looks fright not men: the general has seen Moors
With as bad faces; no *dispraise* to Bertran's.
Dryden.

The criticks, while they like my wares, may *dispraise* my writing. *Spectator.*

My faults will not be hid, and can be no *dispraise* to me that they will not; the clearness of one's mind is never better proved than in discovering its own faults. *Pope.*

DISPREAD', *v. a.* } *Dis* and spread. To
DISPREAD'ER. } spread different ways. in this word, and a few others, says Johnson truly, *dis* has the same force as in Latin composition, and means different ways.

As morning sun her beams *dispreaden* clear,
And in her face fair truth and mercy doth appear
Spenser.

Over him art, striving to compare
With nature, did an arbour green *dispread,*
Framed of wanton ivy, flowing fair,
Through which the fragrant eglantine did spread
His pricking arms, entrailed with roses red. *Id.*

Above, below, around, with art *dispread,*
The sure enclosure folds the genial bed.
Pope's Odyssey.

DISPRO'FIT, *n. s.* *Dis* and profit. Loss; damage; detriment.

DISPRO'OF, *n. s.* *Dis* and proof. Confutation; conviction of error or falsehood.

His remark contains the grounds of his doctrine, and offers at somewhat towards the *disproof* of mine. *Atterbury.*

I need not offer any thing farther in support of one, or in *disproof* of the other. *Rogers.*

DISPROP'ERTY, *v. a.* *Dis* and property. To dispossess of any property.

DISPROPOR'TION, *v. a.* & *n. s.* } *Dis* and
DISPROPOR'TIONABLE, *adj.* } proportion. To
DISPROPOR'TIONABLENESS, *n. s.* } apportion,
DISPROPOR'TIONABLY, *adv.* } or join unfitly, or without
DISPROPOR'TIONAL, *adj.* } symmetry:
DISPROPOR'TIONALLY, *adv.* } disproportionable is unsuitable in the parts, or in comparison: disproportional and disproportionate seem to express the same idea, and the adverbs follow these adjectives in their meaning.
DISPROPOR'TIONATE, *adj.*
DISPROPOR'TIONATELY, *adv.*
DISPROPOR'TIONATENESS, *n. s.*

There sits deformity to mock my body,
To shape my legs of an unequal size,
To *disproportion* me in every part. *Shakspeare.*

Had the obliquity been greater, the earth had not been able to endure the *disproportionable* differences of season. *Browne.*

Musick craveth your acquaintance: many are of such *disproportioned* spirits, that they avoid her company. *Peacham.*

We on earth, with undiscording voice,
May rightly answer that melodious noise;
As once we did, till *disproportioned* sin
Jarred against nature's chime. *Milton.*

Perhaps, from greatness, state and pride,
Thus surprised, she may fall:
Sleep does *disproportion* hide,
And, death resembling, equals all. *Waller.*

For their strength,
The *disproportion* is so great, we cannot but
Expect a fatal consequence. *Denham's Sophy.*

We have no reason to think much to sacrifice to God our dearest interests in this world, if we consider how *disproportionably* great the reward of our sufferings shall be in another. *Tillotson.*

We are apt to set too great a value on temporal blessings, and have too low and *disproportionable* esteem of spiritual. *Smalridge.*

None of our members are crooked or distorted, or *disproportionate* to the rest, either in excess or defect. *Ray.*

It is plain that men have agreed to a *disproportionate* and unequal possession of the earth. *Locke.*

Distance and men's fears have so enlarged the truth, and so *disproportioned* every thing, that we have made the little troop of discontents a gallant army, and already measured by the evening shadow. *Suckling.*

There is no wine of so strong a body as to bear such a *disproportionable* quantity of water as sixty. *Broome.*

That we are designed for a more exalted happiness than can be derived from the things of this life, we may infer from their vast *disproportion* to the desires and capacities of our soul. *Rogers.*

DI'SPROVE, *v. a.* } *Dis* and prove. To
DI'SPROVER, *n. s.* } confute; to convict of error or falsehood. A disprover, as well as expressing this sense, seems corruptly used by Wotton for disapprover.

This exposition they plainly *disprove*, and shew by manifest reason, that of David the words of David could not possibly be meant. *Hooker.*

This Westmoreland maintains,
And Warwick shall *disprove* it. *Shakspeare.*

The single example that our annals have yielded of two extremes, within so short time, by most of the same commenders and *disprovers*, would require no slight memorial. *Wotton.*

It is easier to affirm than to *disprove*. *Holder.*

The traitor's odious name
I first return, and then *disprove* thy claim.
Dryden's Fables.

That false supposition I advanced in order to *disprove* it, and by that means to prove the truth of my doctrine. *Atterbury.*

The cit—a common-council-man by place
Ten thousand mighty nothings in his face,
By situation as by nature great,
With nice precision parcels out the state;
Proves and *disproves*, affirms and then denies
Objects himself, and to himself replies.
Churchill.

DISPU'NISHABLE, *adj.* *Dis* and punishable. Without penal restraint.

No leases of any part of the said lands shall ever be made, other than leases for years not exceeding thirty-one in possession, and not in reversion or remainder, and not *dispunishable* of waste.
Swift's Last Will.

DISPURGE', *v. a.* *Dis* and purge; dis being used expletively. To cleanse or purge.

Thou, then, that hast *dispurged* our score,
And dying wert the death of death,
Be now, whilst on thy name we call,
Our life, our strength, our joy, our all!
Wotton.

DISPU'RSE, *v. a.* *Dis* and purse. To pay; to disburse. 'It is not certain that the following passage should not be written disburse,' says Johnson.

Many a pound of my own proper store,
Because I would not tax the needy commons,
Have I *dispursed* to the garrisons,
And never asked for restitution.
Shakspeare. Henry VI.

DISPUTE', *v. a., v. n.* & *n. s.* } Fr. *disputer*; Spanish and Portug. *disputar*; Ger. and Dutch *disputeren*; Ital. and Lat. *disputare*,
DISPUT'ABLE, *adj.*
DIS'PUTANT, *n. s.* & *adj.*
DISPUTA'TION,
DISPUTA'TIOUS, *adj.*
DISPU'TATIVE, *adj.*
DISPUTE'LESS, *adj.*
DISPU'TER, *n. s.*
from *dis* (diversely) and *puto*, to think. To contend for; discuss: as a neuter verb, to debate; argue; controvert: as a noun, contest; controversy; quarrel. Disputable means both liable to be contested, and fond of disputation. Disputatious and disputative have a similar sense to this last. Disputer and disputant are synonymous; and disputeless means incontrovertible.

Things were *disputed* before they came to be determined: men afterwards were not to *dispute* any longer, but to obey. *Hooker.*

Dispute it like a man.
—— I shall do so;
But I must also feel it as a man.
Shakspeare. Macbeth.

Now was I called to public *disputations* often, with no ill success. *Bp. Hall's Account of himself.*

Thou there wast found
Among the gravest rabbies, *disputant*
On points and questions fitting Moses' chair.
Milton.

Well do I find, by the wise knitting together of your answer, that any *disputation* I can use is as much too weak as I unworthy. *Sidney.*

So *dispute* the prize,
As if you fought before Cydaria's eyes.
Dryden's Indian Emperor.

The question being about a fact, it is begging it, to bring as a proof an hypothesis which is the very thing in *dispute*. *Locke.*

Notwithstanding these learned *disputants*, it was to the unscholastick statesman that the world owed their peace, defence and liberties. *Id.*

If they are not in themselves *disputable*, why are they so much *disputed*? *South.*

Both are vehement *disputers* against the heathen idolatry. *Stillingfleet.*

The atheist can pretend no obligation of conscience, why he should *dispute* against religion. *Tillotson.*

Our *disputants* put me in mind of the skuttle fish, that, when he is unable to extricate himself, blackens all the water about him till he becomes invisible. *Spectator.*

A man must be of a very *disputatious* temper, that enters into state controversies with any of the fair sex. *Addison.*

Until any point is determined to be a law, it remains *disputable* by every subject. *Swift.*

The earth is now placed so conveniently, that plants thrive and flourish in it, and animals live; this is matter of fact, and beyond all *dispute*. *Bentley.*

Did not Paul and Barnabas *dispute* with vehemence about a very little point of conveniency? *Atterbury.*

These conclusions have generally obtained, and have been acknowledged even by *disputers* themselves, till with labour they had stifled their convictions. *Rogers.*

Perhaps this practice might not so easily be perverted, as to raise a cavilling *disputative*, and sceptical temper in the minds of youth. *Watts's Improvement of the Mind.*

There is nothing displays a genius (I mean a quickness of genius) more than a *dispute*; as two diamonds encountering, contribute to each other's lustre. But, perhaps, the odds is much against the man of taste, in this particular. *Shenstone.*

As to the capacity of sitting in parliament, after all the capacities for voting, for the army, for the navy, for the professions, for civil officers, are conceded, it is a *dispute* de lana caprina, in my poor opinion, at least on the part of those who oppose it. *Burke.*

She breathes! But no, twas nothing, or the last.
Faint flutter life *disputes* with death. *Byron*

DISQUA'LIFY, *v. a.* } *Dis* and qualify.
DISQUA'LIFICATION, *n. s.* } To make unfit; to disable by a natural or legal impediment.

Such persons as shall confer benefices on unworthy and *disqualified* persons, after a notice or correction given, shall for that turn be deprived of the power of presenting unto such benefices. *Ayliffe's Parergon.*

I know no employment for which piety *disqualifies*. *Swift.*

My common illness utterly *disqualifies* me for all conversation; I mean my deafness. *Id.*

The church of England is the only body of Christians which *disqualifies* those, who are employed to preach its doctrine, from sharing in the civil power, farther than as senators. *Id. on the Sacramental Test.*

It is recorded as a sufficient *disqualification* of a wife, that, speaking of her husband, she said, God forgive him. *Spectator.*

The power of a member of parliament is uncertain and indirect; and if power rather than splendor and fame were the object, I should think that any of the principal clerks in office, (to say nothing of their superiors) several of whom are *disqualified* by law for seats in parliament, possess far more power than nine-tenths of the members of the House of Commons. *Burke.*

DISQUA'NTITY, *v. a.* *Dis* and quantity. To lessen; to diminish. Not used.

Be entreated
Of fifty to *disquantity* your train;
And the remainders, that shall still depend,
To be such men as may besort your age. *Shakspeare.*

DISQUI'ET, *v. a.*, *n. s.*, & *adj.* } From *dis* and quiet.
DISQUI'ETER, *n. s.* }
DISQUI'ETLY, *adv.* } To disturb; make uneasy; harass; fret. The substantives are synonymous.
DISQUI'ETNESS, *n. s.* }
DISQUI'ETUDE. }

Why art thou so vexed, O my soul? and why art thou so *disquieted* within me. *Psalm.*

All otherwise, said he, I riches rede,
And deem them root of all *disquietness*.
Faerie Queene.

Arius won to himself both followers and great defenders; whereupon much *disquietness* ensued. *Hooker.*

I pray you, husband, be not so *disquiet*;
The meat was well if you were so content.
Shakspeare.

Treachery, and all ruinous disorders, follow us *disquietly* to our graves. *Id. King Lear.*

If we give way to our passions, we do but gratify ourselves for the present, in order to our future *disquiet*. *Tillotson.*

Thou happy creature, art secure
From all the torments we endure;
Despair, ambition, jealousy,
Lost friends, nor love, *disquiets* thee.
Roscommon.

Contentment produces, in some measure, all those effects which the alchymist usually ascribes to what he calls the philosopher's stone; and if it does not bring riches, it does the same thing by banishing the desire of them. If it cannot remove the *disquietudes* arising from a man's mind, body, or fortune, it makes him easy under them. *Addison.*

I had rather live in Ireland than under the frequent *disquiets* of hearing you are out of order. *Swift.*

He rested *disquietly* that night; but in the morning I found him calm. *Wiseman.*

DISQUISI'TION, *n. s.* Lat. *disquisition*. Examination; disputative enquiry.

God hath reserved many things to his own resolution, whose determinations we cannot hope from flesh; but with reverence must suspend unto that great day, whose justice shall either condemn our curiosity, or resolve our *disquisitions*. *Browne.*

The royal society had a good effect, as it turned many of the greatest geniuses of that age to the *disquisitions* of natural knowledge. *Addison's Spectator.*

'Tis indeed the proper place for this *disquisition* concerning the antediluvian earth. *Woodward's Natural History.*

The nature of animal diet may be discovered by taste, and other sensible qualities, and some general rules, without particular *disquisition* upon every kind. *Arbuthnot.*

I am apprehensive that I shall not be able to find leisure for making all the *disquisitions* and experiments which would be desirable on this subject. [Swimming.] I must, therefore, content myself with a few remarks. *Franklin.*

DISRA'NK, *a. a.* *Dis* and rank. To degrade from his rank

DISREGA'RD, *v. a.* & *n. s.* } *Dis* and regard. To treat with slight notice or neglect; contempt.
DISREGA'RDFUL, *adj.* }
DISREGA'RDFULLY, *adv.* }

Since we are to do good to the poor, to strangers, to enemies, those whom nature is too apt to make us

despise, *disregard*, or hate, then undoubtedly we are to do good to all. *Sprat.*

Those fasts which God hath *disregarded* hitherto, he may regard for the time to come. *Smalridge.*

Studious of good, man *disregarded* fame,
And useful knowledge was his eldest aim.
Blackmore.

DISRE'LISH, *v. a.* & *n. s.* *Dis* and relish. To make, or feel a distaste: bad taste; nauseousness.

Oft they assayed,
Hunger and thirst constraining; drugged as oft
With hatefullest *disrelish*, writhed their jaws
With soot and cinders filled. *Milton.*

Fruits of taste to please
True appetite, and not *disrelish* thirst
Of nectarous draughts between, from milky stream.
Id.

Bread or tobacco may be neglected, where they are shewn not to be useful to health, because of an indifferency or *disrelish* to them. *Locke.*

The same anxiety and solicitude that embittered the pursuit, *disrelishes* the fruition itself. *Rogers.*

The world is become too busy for me: every body is so concerned for the publick, that all private enjoyments are lost, or *disrelished*. *Pope.*

DISREP'UTE, *n. s.* } *Dis* and reputation.
DISREPUTA'TION, *n. s.* } Disgrace; dishonor; want of reputation.

I will tell you what was the course in the happy days of queen Elizabeth, whom it is no *disreputation* to follow. *Bacon.*

The king fearing lest that the bad success might discourage his people, and bring *disreputation* to himself, forbad any report to be made. *Hayward.*

Gluttony is not of so great *disreputation* amongst men as drunkenness. *Taylor's Holy Living.*

How studiously did they cast a slur upon the king's person, and bring his governing principles under a *disrepute*. *South.*

DISRESPECT', *n. s.* } *Dis* and respect.
DISRESPECT'FUL, *adj.* } Incivility; want of
DISRESPECT'FULLY, *adv.* } reverence; irreverence; rudeness.

Any *disrespect* to acts of state, or to the persons of statesmen, was in no time more penal. *Clarendon.*

Aristotle writ a methodical discourse concerning these arts, chusing a certain benefit before the hazard that might accrue from the vain *disrespects* of ignorant persons. *Wilkins.*

What is more usual to warriours than impatience of bearing the least affront or *disrespect*? *Pope.*

We cannot believe our posterity will think so *disrespectfully* of their great grandmothers, as that they made themselves monstrous to appear amiable.
Addison's Spectator.

DISRO'BE, *v. a.* *Dis* and robe. To undress; to uncover; to strip.

The holy saints of their rich vestiments
He did *disrobe*, when all men carelesse slept,
And spoiled the priests of their habiliments.
Spenser. Faerie Queene.

Kill the villain straight,
Disrobe him of the matchless monument,
Thy father's triumph o'er the savages.
Shakspeare. King John.

These two great peers were *disrobed* of their glory, the one by judgment, the other by violence. *Wotton.*

Who will be prevailed with to *disrobe* himself at once of all his old opinions, and pretences to knowledge and learning, and turn himself out stark naked in quest afresh of new notions? *Locke.*

When the trees are all bare, not a leaf to be seen,
And the meadows their beauty have lost;
When Nature 's *disrobed* of her mantle of green,
And the streams are fast bound with the frost.
Brerewood.

DISRU'PTION, *n. s.* Lat. *disruptio*. The act of breaking asunder: the breach made.

This secures them from *disruption*, which they would be in danger of, upon a sudden stretch or contortion. *Ray.*

The agent which effected this *disruption*, and dislocation of the strata, was seated within the earth.
Woodward.

If raging winds invade the atmosphere,
Their force its curious texture cannot tear,
Nor make *disruption* in the threads of air.
Blackmore.

DISSA'TISFY, *v. a.* } *Dis* and satisfy.
DISSATISFA'CTION, *n. s.* } To displease; discontent; fail to
DISSATISFA'CTORY, *adj.* } please: dissatisfaction is the state of being dissatisfied: dissatisfactory, and dissatisfactoriness, express inability to give satisfaction.
DISSATISFA'CTORINESS, *n. s.* }

He that changes his condition, out of impatience and *dissatisfaction*, when he has tried a new one, wishes for his old again. *L'Estrange.*

I still retain some of my notions, after your lordship's having appeared *dissatisfied* with them.
Locke.

The ambitious man has little happiness, but is subject to much uneasiness and *dissatisfaction*.
Addison's Spectator.

In vain we try to remedy the defects of our acquisition, by varying the object: the same *dissatisfaction* pursues us through the circle of created goods.
Rogers.

The advantages of life will not hold out to the length of desire; and, since they are not big enough to satisfy, they should not be big enough to *dissatisfy*.
Collier.

If we see a universal spirit of distrust and *dissatisfaction*, a rapid decay of trade, dissensions in all parts of the empire, we may pronounce, without hesitation, that the government of that country is weak, distracted, and corrupt. *Junius.*

DISSECT', *v. a.* } Fr. *disséquer*; Lat. *dis*
DISSECT'ION, *n. s.* } *secare*, from *dis* and *seco*,
DISSECT'OR, *n. s.* } to carve or cut. To divide an animal body into its parts: applied also figuratively.

Let no man say, the world itself being dead,
'Tis labour lost to have discovered
The world's infirmities, since there is none
Alive to study this *dissection*. *Donne.*

She cut her up; but, upon the *dissection*, found her just like other hens. *L'Estrange.*

No mask, no trick, no favour, no reserve;
Dissect your mind, examine every nerve.
Roscommon.

Critics to plays for the same end resort,
That surgeons wait on trials in a court:
For innocence condemned they've no respect,
Provided they've a body to *dissect*. *Congreve.*

Such strict enquiries into nature so true and so perfect a *dissection* of human kind, is the work of extraordinary diligence. *Granville.*

Following life in creatures we *dissect*,
We lose it in the moment we detect. *Pope.*

With strict propriety their care's confined
To weigh out words, while passion halts behind:
To syllable-*dissectors* they appeal,
Allow their accent, cadence,—fools may feel.
Churchill.

I shall enter upon the *dissection* of a coquet's heart, and communicate that curious piece of anatomy.
Addison.

DISSEISE', *v. a.* From Fr. *dessaisir*, i. e. action; *de saisir* an action concerning seizing. To dispossess; deprive of legal right. See the following articles on DISSEISIN and DISSEISOR.

He so *disseized* of his griping gross,
The knight his thrillant spear again assayed,
In his brass-plated body to emboss.
Faerie Queene.

If a prince should give a man, besides his ancient patrimony which his family had been *disseized* of, an additional estate, never before in the possession of his ancestors, he could not be said to re-establish lineal succession. *Locke.*

DISSEISIN, in law, an unlawful dispossessing a man of his land, tenement, or other immoveable and incorporeal right. It is a species of injury by ouster, or a privation of the freehold, consisting in a wrongful putting out of him that is seised of the freehold. It differs from abatement and intrusion, which denote a wrongful entry where the possession was vacant, by its being an attack upon him who is in actual possession, and turning him out of it. The former were an ouster from a freehold in law, this is an ouster from a freehold in deed. Disseisin may be effected either in corporeal inheritances, or incorporeal. Disseisin of things corporeal, as of houses, lands, &c., must be by entry and actual dispossession of the freehold (Co. Litt. § 181); as if a man enters either by force or fraud into the house of another, and turns, or at least keeps, him or his servants out of possession. Disseisin of incorporeal hereditaments cannot be an actual dispossession; for the subject itself is neither capable of actual bodily possession, nor dispossession; but it depends on their respective natures and various kinds; being, in general, nothing more than a disturbance of the owner in the means of coming at, or enjoying them. With regard to freehold rent in particular, our ancient law-books (Finch. L. 165, 166. Litt. § 237, &c.) mention five methods of working a disseisin thereof:—1. By enclosure; where the tenant so encloseth the house or land, that the lord cannot come to distrain thereon, or demand it. 2. By forestaller, or lying in wait; when the tenant besetteth the way with force and arms, or by menaces of bodily hurt, affrights the lessor from coming. 3. By rescous; that is, either by violently retaking a distress taken, or by preventing the lord, with force and arms, from taking any at all. 4. By replevin; when the tenant replevies the distress at such time when his rent is really due. 5. By denial; which is, when the rent being lawfully demanded, is not paid. All, or any of these circumstances amount to a disseisin of rent; that is, they wrongfully put the owner out of the only possession, of which the subject matter is capable, namely, the receipt of it. But all these disseisins of hereditaments incorporeal, are only so at the election and choice of the party injured; if, for the sake of more easily trying the right he is pleased to suppose himself disseised. (Litt. § 588, 589.) Otherwise, as there can be no actual dispossession, he cannot be compulsively disseised of any incorporeal hereditament. Thus also, even in corporeal hereditaments, a man may frequently suppose himself to be disseised, when he is not so in fact, for the sake of entitling himself to the more easy and commodious remedy of an assise of novel disseisin, instead of being driven to the more tedious process of a writ of entry. (4 Burr. 110.)

The true injury of compulsive disseisin seems to be that of dispossessing the tenant, and substituting one's self to be the tenant of the land in his stead; in order to which, in the times of pure feodal tenure, the consent or connivance of the lord, who, upon every descent or alienation, personally gave, and who, therefore, alone could change the seisin or investiture, seems to have been considered as necessary. But when, in process of time, the feodal form of alienations was off, and the lord was no longer the instrument of giving actual seisin, it is probable that the lord's acceptance of rent or service, from him who had dispossessed another, might constitute a complete disseisin. Afterwards, no regard was had to the lord's concurrence, but the dispossesser himself was considered as the sole disseisor; and this wrong was then allowed to be remedied by entry only, without any form of law, or against the disseisor himself; but required a legal process against his heir or alienee. And when the remedy by assise was introduced, under Henry II., to redress such disseisins as had been committed within a few years next preceding, the facility of that remedy induced others, who were wrongfully kept out of the freehold, to feign, or allow themselves to be disseised, merely for the sake of the remedy. *Blackst. Comm.* book iii. ch. 10.

If a feme sole be seised of lands in fee, and is disseised, and then taketh husband; in this case the husband and wife, as in right of the wife, have right to enter, and yet the dying seised of the disseisor shall take away the entry of his wife after the death of the husband. (Co. Lit. 246.) If a person disseises me, and, during the disseisin, he or his servants cut down the timber growing upon the land, and afterwards I re-enter into the land, I shall have action of trespass against him; for the law, as to the disseisor and his servants, supposes the freehold to have been always in me: but if the disseisor be disseised by another, or if he makes a feoffment, gift in tail, lease for life or years, I shall not have an action against the second disseisor, or against those who come in by title: for all the mesne profits shall be recovered against the disseisor himself. (11 Rep. 52. Keilw. 1.)

By Magna Charta, 9 Henry III., c. 29, no man is to be disseised, or put out of his freehold, but by lawful judgment of his peers, or by the law of the land; and by stat. 32 Henry VIII. c. 33, the dying seised of any disseisor of, or in any lands, &c., having no right therein, shall not

be a descent in law, to take away an entry of a person having lawful title of entry, except the disseisor hath had peaceable possession five years, without entry or claim by the person having lawful title.

According to some writers, disseisin is of three sorts, viz. simple disseisin, committed by day, without force and arms: and disseisin by force, and fresh disseisin. Assises are called writs of disseisin, which lie against disseisors in any case: whereof some are termed little writs of disseisin, as being vicontial, that is, suable before the sheriff in the county court, because determinable by him without assise.

DISSEISOR is he who disseiseth, or puts another out of his land: as the disseisee is he who is put out. If a disseisor, after he has expelled the right owner, gains peaceable possession of the lands five years without claim, and continues in possession, so as to die seised, and the land descends to his heirs, they will have a right to the possession till the owner recovers at law; and the owner shall lose his estate for ever, if he doth not prosecute his suit within the time limited by the statute of limitations.

And if a disseisor levy a fine of the land whereof he is disseised unto a stranger, the disseisor shall keep the land for ever; for the disseisor against his own fine cannot claim, and the conusee cannot enter, and the right which the disseisor had, being extinct by the fine, the disseisor shall take advantage of it. (2 Rep. 56.) But this is to be understood, where no use is declared of the fine by the disseisee; when it shall enure to the use of the disseisor, &c. (1 Lev. 128.) A disseisor in assize, where damages are recovered against him, shall recover as much as he hath paid in rents chargeable on the lands before the disseisin. (Jenk. Cent. 189.) But if the disseisor or his feoffee sows corn on the land, the disseisee may take it before or after severance. (Dyer 31. 173. 11 Rep. 46.) Where a man hath a house in fee, &c., and locks it, and then departs; if another person comes to his house, and takes the key of the door, and says that he claims the house to himself in fee, without any entry into the house, this is a disseisin of the house. (2 Danv. Abr. 624.) If the feoffor enters on the land of the feoffee, and makes a lease for years, &c., it is a disseisin; though the intent of the parties to the feoffment was, that the feoffee should make a lease to the feoffor for life. (2 Rep. 59.) If lessee for years is ousted by his lessor, this is said to be no disseisin. (Cro. Jac. 678.) A man who enters on another's land, claiming a lease for years, who hath not such lease, is a disseisor; though if a man enters into the house of another by his sufferance, without claiming any thing, it will not be a disseisin. (9 Henry VI., 21, 31. 2 Danv. 625.) If a person enters on lands by virtue of a grant or lease, that is, void in law, he is a disseisor. (2 Danv. 630.) As the king in judgment of law can do no wrong, he cannot be a disseisor. (1 Ed. V. 8.) A disseisor is to be fined and imprisoned; and the disseisee restored to the land, &c., by stat. 20, Henry III. c. 3. Where a disseisor is disseised, it is called disseisin upon disseisin.

DISSE'MBLE, *v. a.* & *v. n.* } Fr. *dissimuler;* Span. and Port. *dissimular;* Ital. and Latin, *dissimulare*, from *dis* privative, and *simulare*, signifying to 'feign that not to be which is.' Minsheu.
DISSE'MBLER, *n. s.*
DISSE'MBLING, *n. s.*
DISSE'MBLINGLY, *adv.*

Ye *dissembled* in your hearts when ye sent me unto the Lord your God, saying, Pray for us.
Jeremiah xlii. 20.

Your son Lucentio
Doth love my daughter, and she loveth him,
Or both *dissemble* deeply their affections.
Shakspeare.

I that am curtailed of this fair proportion,
Cheated of feature by *dissembling* nature,
Deformed, unfinished. *Id. Richard III.*

Such an one, whose virtue forbiddeth him to be base and a *dissembler*, shall evermore hang under the wheel. *Raleigh.*

The French king, in the business of peace, was the greater *dissembler* of the two. *Bacon. Henry VII.*

She answered, that her soul was God's; and touching her faith, as she could not change, so she would not *dissemble* it. *Hayward.*

Man is to man all kind of beasts; a fawning dog, a roaring lion, a thieving fox, a robbing wolf, a *dissembling* crocodile, a treacherous decoy, and a rapacious vulture. *Cowley.*

Thy function too will varnish o'er our arts,
And sanctify *dissembling*.
Rowe's Ambitious Stepmother.

If the show of any thing be good for any thing, I am sure sincerity is better; for why does any man *dissemble*, or seem to be that which he is not, but because he thinks it good to have such a quality as he pretends to? *Tillotson.*

In vain on the *dissembled* mother's tongue
Had cunning art and sly persuasion hung;
And real care in vain, and native love,
In the true parents panting breast had strove.
Prior.

Men will trust no farther than they judge a person for sincerity fit to be trusted: a discovered *dissembler* can achieve nothing great and considerable. *South.*

It is true indeed that we should not *dissemble* and flatter in company; but a man may be very agreeable, strictly consistent with truth and sincerity, by a prudent silence where he cannot concur, and a pleasing assent where he can. *Spectator.*

They are the happiest, who *dissemble* best
Their weariness; and they the most polite
Who squander time and treasure with a smile,
Though at their own destruction. *Cowper.*

DISSE'MINATE, *v. a.* } From Lat. *disseminо*, *dis* diversely, and *semino*, to sow.
DISSEMINA'TION, *n. s.*
DISSEMINA'TOR.
To diffuse, or scatter, as seed. The act of sowing or diffusing.

Ill uses are made of it many times in stirring up seditions, rebellions, in *disseminating* of heresies, and infusing of prejudices. *Hammond.*

Though now at the greatest distance from the beginning of errour, yet we are almost lost in its *dissemination*, whose ways are boundless, and confess no circumscription. *Browne.*

There is a nearly uniform and constant fire of heat *disseminated* throughout the body of the earth.
Woodward.

The Jews are so *disseminated* through all the trading parts of the world, that they are become the instruments by which the most distant nations converse with one another, and by which mankind are knit together in a general correspondence. *Spectator.*

By firmness of mind, and freedom of speech, the gospel was *disseminated* at first, and must still be maintained. *Atterbury.*

DISSENT', *v. a.* & *n. s.* } Fr. *dissenter;* It. and Lat. *dissentire;* from *dis* (diversely) and *sentio*, to perceive or discern.
DISSEN'SION, *n. s.*
DISSEN'SIOUS, *adj.*
DISSENTA'NEOUS, *adj.*
DISSENT'ER, *n. s.*

To disagree in judgment; to differ; applied particularly to a difference of opinion with the established church of England. Dissension is disagreement in any degree: dissensious, quarrelsome.

We han founden this wicked man stirynge *dissension* to alle iewis in alle the world, and auctour of *dissencioun* of the secte of Nazarens. *Wiclif. Dedis.* 24.

Either in religion they have a *dissensious* head, or in the commonwealth a factious head. *Ascham's Schoolmaster.*

We see a general agreement in the secret opinion of men, that every man ought to embrace the religion which is true, and to shun, as hurtful, whatever *dissenteth* from it, but that most which doth farthest *dissent.* *Hooker.*

You *dissensious* rogues.
That rubbing the poor itch of your opinion,
Make yourselves scabs. *Shakspeare. Coriolanus.*

Friends now, fast sworn,
Whose hours, whose bed, whose meal, whose exercise,
Are still together; who twine, as 'twere in love
Unseparable, shall within this hour,
On a *dissension* of a doit, break out
To bitterest enmity. *Id.*

Let me not be any occasion to defraud the publick of what is best, by any morose or perverse *dissentings.* *King Charles.*

How will *dissenting* brethren relish?
What will malignants say? *Hudibras.*

Grown
In wealth and multitude, factious they grow;
But first among the priests *dissension* springs. *Milton.*

Debates, *dissensions,* uproars are thy joy;
Provoked without offence, and practised to destroy. *Dryden.*

In propositions, where though the proofs in view are of most moment, yet there are grounds to suspect that there is proof as considerable to be produced on the contrary side; there suspense or dissent are voluntary actions. *Locke.*

They will admit of matter of fact, and agree with *dissenters* in that; but differ only in assigning of reasons. *Id.*

There are many opinions in which multitudes of men *dissent* from us, who are as good and wise as ourselves. *Addison.*

What could be the reason of this general *dissent* from the notion of the resurrection, seeing that almost all of them did believe the immortality of the soul? *Bentley's Sermons.*

DISSENTERS. Of the comprehensiveness of this term as designating, in strict language, all who differ in opinion from the Established Church, few of our readers can be altogether ignorant. Mr. Justice Blackstone considers a cognate legal term, non-conformists, as embracing all who absent themselves from the public worship of the Church, whether, 1. Through total irreligion, they attend the service of no other persuasion; or, 2. Through a mistaken zeal, 'weakness of intellect,' or 'perverseness and acerbity of temper, which,' he adds, 'is often the case,' they unite in worship with other communities, 'herding with a party.' This latter class of dissenters is divisible again, according to the same learned authority, into 'the papists,' who divide from the national church, 'upon material though erroneous reasons,' and the Protestant Dissenters, many of whom divide from it 'upon matters of indifference; or, in other words, upon no reason at all.'

These terms in fact, then, though constantly used to describe large bodies of religionists, are neither of them, religious terms: they simply express the political relation of a heterogeneous multitude of their fellow-subjects to the established church; a multitude including the wide extremes of the devout catholic and the avowed unbeliever; the Painite and the Southcottite; the ultra-Calvinist and the rational Unitarian. They are terms too, which, unlike the vast majority of those in our Lexicon, we trust, will be found to vary in their meaning according to that particular part or subdivision of our common, happy country in which these observations may meet the eye of our readers. In England, for instance, his majesty's good and acute subjects of the kirk of Scotland, in common with the other Presbyterians, are dissenters; in Scotland, the Episcopalian of the ever-loyal church of England is a dissenter; in Canada, the Protestant of whatever denomination; all of them in their respective situations, in the places 'aforesaid,' and for reasons by them deemed 'material' or 'no reason at all,' dividing from the established church.

We can only, therefore, in this place affix to so vague a term its more common and popular meaning. Connected necessarily with no religion, as we, after Mr. Justice Blackstone, contend, it has still too much of the savour of piety about it to be affiliated by the unbeliever; on the other hand it has too little of antiquity and dignity to be acknowledged by the consistent Catholic; to the Protestant dissenters, therefore, whatever the sages of the law may determine, and whatever may be its unhappy or discreditable associations, it seems, at last to belong: they are THE DISSENTERS of common parlance; and we propose, therefore, to offer to our readers in this paper, 1st, Some account of their existing legal situation and rights; 2dly. Of the principles common to this body as separatists from the establishment; and, 3dly. Of their political history.

1. *Of the legal situation of Dissenters.*—The basis of the existing law of England, on the subject of separatists, is still to be found in the statutes of 1 Eliz. c. 2. §. 14.; 23 Eliz. c. 1.; and 29 Eliz. c. 6. The first of these enacts, that every person, not having reasonable excuse, shall resort to his parish church or chapel, or upon reasonable let thereof to some usual place where common prayer shall be used, on every Sunday and holiday,' on pain of punishment by the censures

of the church, or of forfeiting, for every offence, 12*d*. The second, that every person above the age of sixteen, who shall not repair to some church or chapel, or usual place of common prayer, shall forfeit for every month £20; and if he shall forbear for twelve months, he shall be bound to the good behaviour till he conform. The third, that every offender in not repairing to church, having been once convicted, shall, without any other indictment or conviction, pay half yearly into the exchequer £20 for every month afterwards till he conform; which if he shall omit to do, the king may seize all his goods, and two parts of his lands. And by 3 Jac. I. c. 4, §. 11, the king may refuse the £20 a month, and take two parts of the land at his option.

By the 3 Jac. I. c. 5, no recusant, not repairing to church, being convicted thereof, shall enjoy any public office; or shall practise law or physic, or be executor, administrator, or guardian. And by the 35 El. c. 1., if any person refusing to repair to church, shall be present at any assembly, meeting, or conventicle, under pretence of any exercise of religion, he shall be imprisoned till he conform; and if he shall not conform in three months, he shall abjure the realm, which if he shall refuse to do, or after abjuration shall not go, or shall return without license, he shall be guilty of felony, without benefit of clergy. And whether he shall abjure or not, he shall forfeit his goods and his lands during life.

These severe injunctions and penalties are suspended, but not repealed, by the celebrated Toleration Act, 1 W. & M. st. 1. c. 18, 'for exempting their majesty's protestant subjects, dissenting from the church of England, from the penalties of certain laws;' which is confirmed by stat. 10 An. c. 2, and declares that neither the laws above-mentioned, nor any other penal laws made against popish recusants (except the corporation and test acts), shall extend to any dissenters, other than papists, and such as deny the Trinity: provided, 1. That they take the oaths of allegiance and supremacy (or make a similar affirmation, being Quakers—see stat. 8 Geo. I. c. 6); and subscribe the declaration against popery. 2. That they repair to some congregation certified to, and registered in, the court of the bishop or archdeacon, or at the county sessions. 3. That the doors of such meeting-house shall be unlocked, unbarred, and unbolted; in default of which the persons meeting there are still liable to all the penalties of the former acts.

The offence of non-conformity is therefore not to be considered as legally abrogated, although it 'ceases to exist,' as Blackstone says, 'with regard to protestant dissenters, *during their compliance with the condition* imposed by the act of toleration: and, under these conditions, all persons, who will approve themselves no papists or oppugners of the Trinity, are left at full liberty to act as their consciences shall direct them in the matter of religious worship. And if any person shall wilfully, maliciously, or contemptuously disturb any congregation, assembled in any church or permitted meeting-house, or shall misuse any preacher or teacher there, he shall (by virtue of the same statute), be bound over to the sessions of the peace, and forfeit £20. But by statute 5 Geo. I. c. 4, no mayor or principal magistrate must appear at any dissenting meeting with the ensigns of his office, on pain of disability to hold that or any other office; the legislature judging it a matter of propriety, that a mode of worship set up in opposition to the national, when allowed to be exercised in peace, should be exercised also with decency, gratitude, and humility. Neither doth the act of toleration extend to enervate those clauses of the statutes 13 and 14 Car. II. c. 4, and 17 Car. II. c. 2, which prohibit (upon pain of fine and imprisonment), all persons from *teaching school*, unless they be licensed by the ordinary, and subscribe a declaration of conformity to the liturgy of the church, and reverently frequent divine service established by the laws of the kingdom.'

Since the time of Blackstone, by stat. 53 Geo. III. c. 160, so much of 1 W. & M. c. 18, as excepts persons denying the Trinity, from the benefit of that act, and so much of stat. 9 and 10 W. III. c. 32, as imposes penalties on persons denying the Trinity, are repealed; 57 Geo. III. c. 70, also repeals the like provisions of the Irish act 6 Geo. I. c. 5.

So far, therefore, has our statute-book been cleared of all that directly or practically imposes penal restrictions on Protestant dissenters in the exercise of their religion. But important barriers are still placed around them in regard to what they consider as their civil rights. The statute 13 Car. 2, st. 2, c. 1, usually called the Corporation Act, disqualifies for offices relating to the government of any city or corporation, such as have not, within a twelvemonth before their election, received the sacrament of the Lord's Supper, according to the rites of the church of England (enjoining also the oaths of allegiance and supremacy); and the 25 Car. II. c. 2, commonly called the Test Act, directs all officers civil and military, to take the oath, and make the declaration against transubstantiation six months after their admission, and also within the same time to receive the sacrament of the Lord's Supper, according to the usage of the church of England. If, without taking the sacramental qualification within the time prescribed by the act, a person continues to occupy a civil office, or to hold a military commission, and is lawfully convicted, then he is disabled from thenceforth, for ever, from bringing any action in course of law, from prosecuting any suit in any court of equity, from being guardian of any child, or executor or administrator of any person, as well as from receiving any legacy. Such is the legal situation of the dissenting laity.

Dissenting teachers in order to be exempted from the penalties of the statutes 13 and 14 Car. II. c. 1; 15 Car. II. c. 6, must subscribe the articles of religion mentioned in stat. 13 Eliz. c. 12 (which only concern the confession of the true Christian faith, and the doctrine of the sacraments); with an express exception of those relating to the government and powers of the church, and to infant baptism; or, if they scruple subscribing the same, are to make and subscribe the declaration prescribed by 19 Geo. III. c. 44, professing themselves to be Christians and Protestants, and that they believe the Scripture to contain the revealed will of God, and to be the rule of doctrine and practice.

'And the justices at the sessions where any Protestant dissenting minister shall live, are required to tender and administer the said last-mentioned declaration to such minister, upon his offering himself to make and subscribe the same, and thereof to keep a register; for the registering of which he shall pay 6*d.* to the officer of the court, and no more; and 6*d.* for a certificate thereof signed by such officer.'

By stat. 10 Ann. c. 2, § 9. Any preacher or teacher of any congregation of dissenting protestants, duly qualified according to the act of W. & M., shall be allowed to officiate in any congregation, although the same be not in the county where he was so qualified; provided that the place of meeting hath been duly certified and registered: and such teacher or preacher shall, if required, produce a certificate of his having so qualified himself, under the hand of the clerk of the peace where he was qualified; and shall also, before any justice of such county or place where he shall so officiate, make and subscribe such declaration, and take such oaths as aforesaid, if required.

And by 1 W. & M. c. 18. § 11., and 19 Geo. III., c. 44. § 1. Every such teacher and preacher, that is a minister, preacher, or teacher of a congregation, having taken the oaths, and subscribed as aforesaid, shall from thenceforth be exempted from serving on any jury, or from being chosen or appointed to bear the office of churchwarden, overseer of the poor, or any other parochial or ward office, or other office, in any hundred of any shire, city, town, parish, division, or wapentake, and by 42 Geo. III., c. 90, and 43 Geo. III., c. 10, from serving in the militia, either personally or by substitute, if he be a licensed teacher of any separate congregation, and has been licensed twelve months previous to the yearly general meeting appointed to be held in October, &c.: and by 43 Geo. III., c. 96, § 12, from serving under the army of reserve act, If he be a licensed teacher of any separate congregation in holy orders, or pretended holy orders, and not carrying on any other trade, or exercising any other occupation for his livelihood, except that of a schoolmaster.

By stat. 52 Geo. III., c. 155, § 2, no congregation of Protestants for religious worship, where more than twenty persons shall be present besides the preacher's family, shall be permitted (unless registered under former acts) until duly certified to the bishop, &c., or to the sessions, and a due return shall be made thereof once a year to the bishop or archdeacon, and registered in the court of the bishop, &c., on penalty of £20 on every person allowing any such congregation, to meet in any place occupied by him. Persons preaching in any place without consent of occupiers, are liable to a penalty of £30.

And by § 4. Every person who shall teach or preach at, or officiate in, or shall resort to any congregation or assembly for religious worship of protestants, whose place of meeting shall be duly certified according to the provisions of this act, or any other act or acts relating to the certifying and registering of places of religious worship, shall be exempt from all such pains and penalties under any act or acts relating to religious worship, as any person who shall have taken the oaths and made the declaration prescribed by or mentioned in the 1 W. & M. or any act amending the said act, is by law exempt. And by § 6, it is provided, that no person shall be required by any justice to go to any greater distance than five miles from his own home, or from the place where he shall be residing at the time of such requisition, for the purpose of taking such oaths as aforesaid.

§ 7. Any of his majesty's protestant subjects may appear before any one justice, and produce to such justice a printed or written copy of the said oaths and declaration, and require such justice to administer such oaths, and to tender such declaration to be made, taken, and subscribed by such person; and thereupon such justice shall administer such oaths, and tender such declaration to the person requiring to take and make and subscribe the same; and such person shall take and make and subscribe such oaths and declaration in the presence of such justice accordingly; and such justice shall attest the same to be sworn before him, and shall transmit or deliver the same to the clerk of the peace for the county, &c., for which he shall act as such justice, before or at the next general or quarter sessions of the peace for such county, &c. And for the making and signing of which certificate, where the said oaths and declaration are taken and made on the requisition of the party taking and making the same, such justice shall be entitled to demand and have a fee of 2*s.* 6*d.* and no more: and such certificate shall be conclusive evidence that the party named therein has made and taken the oaths and subscribed the declaration in manner required by this act.

Dissenters chosen to any parochial or ward offices, and scrupling to take the oaths, may execute the office by deputy, who shall comply with the law in this behalf. Stat. 1 W. & M. st. 1, c. 18.—But it appears that they are not subject to fine on refusing to serve corporation offices. For where a freeman of London was elected one of the sheriffs, but refused to take the office on account of his being a dissenter, and, as such, not having received the sacrament according to the rites of the Church of England, within a year before his election, an action was brought in the Sheriff's Court, for the penalty incurred by such refusal and a judgment recovered; which judgment was affirmed in a writ of error brought in the court of Hustings. But the defendant having obtained a commission of errors, the judges' delegates reversed both judgments; and, on a writ of error in parliament, this judgment of reversal was affirmed; the judges being (except one) of opinion that the defendant was at liberty to object to the validity of his election, on the ground of his own nonconformity.

And thus the reader has before him a summary view of the existing legal situation and rights of the Protestant Dissenting body.

2. *Of the principles common to this body as separatists from the establishment*, we know of no general authentic summary: but dissenters at large are very familiar with those arguments for

the liberty of conscience, the right of private judgment, and final obedience to God alone in religion, which they consider as involving the right and duty of the course they adopt. They are also not without respectable publications on the subject, by learned individuals of their body. It will be sufficient to mention those of Doddridge, Watts, Dr. John Taylor, Neal, Delaune, Palmer, and Towgood, all of whom have produced able defences of the dissenting system.

The celebrated Richard Baxter declared, what is true, perhaps, of a majority of the existing dissenters, that the Non-conformists of his day agreed with the doctrines of the thirty-nine articles, and differed only from the church in the form of government. He says, that the Independents, as well as Presbyterians, offered to subscribe to the articles, except as to prelacy and ceremony. 'We are one,' he adds, 'with the church of England in all the necessary points of faith and Christian practice.'

Yet these men departed from the church of England, at the expense of all their earthly comforts; and some of them braving persecution, 'even to death;' laid the foundation of the existing dissent, by denying the authority of any body of fallible men to 'decree rites and ceremonies' in the church. They contended, as do the modern dissenters, that what was left indifferent by the only lawgiver of his church, should not be made important and peremptorily enjoined upon his followers. They revolted, particularly, at subscribing to the principle of 'a power in the church to decree rites and ceremonies, and to have authority in matters of faith,' as so indefinite and extensive, that under the shadow of it, all the enormous usurpations and superstitions of the church of Rome might be and have been included. If the church of England, it is moreover said, claims and exercises this power, and obliges all its ministers to subscribe to articles of faith, which it hath authoritatively decreed, and to use in religious worship ceremonies and rites, which it hath authoritatively enjoined; hath not the church of France, or the church of Spain, the same authority and power? It cannot be an exclusive privilege of any one church. And if it be allowed that the church of Rome has this prerogative, such a claim would overthrow the Reformation and the foundations of the church of England itself. They say, with a modern divine of the church of England, 'Whenever useless rites and ceremonies are imposed, corruptions are passed into a law, and the terms of communion are such as are not authorised by the law of Christ, then it becomes a duty to dissent, and they are the separatists who compel others to divide, not they who deplore the necessity of so doing.'

But dissenters have further enquired, who are the persons that are, in point of fact, invested with this authority and power? In other words, who are the church? This power to order the manner of God's worship, and to settle articles of faith, is not lodged in the bishops and clergy, who are usually denominated our spiritual pastors and guides, but entirely in the king and parliament of these realms, under whose direction and control the clergy are to act. Accordingly, the dissenters allege, that the church of England is a parliamentary church; not properly an ally, but a mere creature of the existing government, depending entirely upon the acts and authority of parliament for its essence and frame. The qualifications of its ministers, their power to officiate, the manner in which they are to administer the sacraments, are all limited and prescribed by authority of parliament: and this authority, which at first made, can alone alter and new make it; can abolish, or add to, its articles or rites, according to its pleasure, even though the whole body of bishops and clergy ever so much dislike or ever so earnestly protest against it. Therefore, while some dissenters justify their dissent from the establishment, because, for example, they think that some ceremonies imposed, or the various orders of ministers, or the received subjects of baptism, or the mode of administering baptism and the Lord's supper, or the state of her discipline, are incompatible with the scriptural pattern; others go farther, and attempt to prove, that every religious establishment is neither more nor less than a direct violation of some of the strongest injunctions of the great Head of the church.

These quote the words of Jesus Christ, 'My kingdom is not of this world,' as virtually forbidding all such attempted alliances between church and state, as every ecclesiastical establishment involves. They say that such a system debases Christianity into an engine of state, secularises its ministers and institutions, argues a concealed distrust of the apostolic weapons of faith, prayer, and 'the words of truth and soberness,' and is, in its influence on the conduct of the dominant party towards those who differ from them, essentially persecuting.

In confirmation of this view of the subject, they adduce the existing state of the laws with regard to dissenters. They argue that, every man has a right to the common privileges of the society in which he lives; and among these common privileges is a legal capacity for serving his sovereign and country; a right, so important, that the forfeiture of it is made the punishment of some of the greatest crimes. No man who does not forfeit that capacity of serving his sovereign and country, which is his natural right, as well as the honor and emoluments that may happen to be connected with it, by overt-acts, ought to be deprived of them; and disabilities that are not thus incurred, are unjust penalties, implying both disgrace and privation. Punishment, without the previous proof of guilt, cannot be denied to be an injury; and injuries inflicted, on account of religion, are undoubtedly persecutions.

The dissenters, therefore, contend, that the subjection to higher powers, and obedience to magistrates, which the Scriptures enjoin on Christians, relates only to civil, not at all to religious matters; and that so far is Christianity from enjoining, that it actually forbids obedience to civil governors in things of a religious nature. It commands us to 'call no man upon earth father or master,' Matthew xxiii. 8, 9, i. e. to acknowledge no authority or jurisdiction of any in matters of religion, but to remember that

'One only is our master' and lawgiver, even Christ; and that all Christians are brethren, Matthew xx. 25.

We cannot follow out the dissenting system into its numerous separate lines of divergence from the established church. Under the particular names of each of their well-known denominations will these be fully discussed. But many pious and excellent men, we may add, have divided from the church of England, on account of her laxity in discipline; others from the evident disagreement, as they allege, between the doctrines of the desk, or liturgy, and those of the pulpit; and while the major part of dissenters, as we have stated, profess agreement with her doctrinal articles, a respectable minority would object to several of them. The entire system of Wesleyan Methodism, a species of modern dissent, has grown out of the first of these complaints against the church. We do not feel ourselves called upon to add more as to the general principles of this body. See METHODISTS.

3. Their *history*, dissenters, of course, contend, commences with the persecutions of that early sect of our religion with whose affairs the book of the Acts of the Apostles is occupied: but, in this country, they consider themselves the successors of the Wicliffites and Lollardites of the fourteenth century. Of John Wicliff Mr. Gilpin says, 'The *authority* claimed by the church he strenuously opposed. It was a scandal, he would say, to the Christian church, that any of its members should set up their own authority against that of their Saviour. The great argument of that day (which was indeed a subtle one) for the authority of the church, was this. Many persons, besides Mathew, Mark, Luke, and John, wrote gospels; but the church rejected them all, excepting these four: and this it did by its own proper authority. It might, by the same authority, have rejected those four gospels, and have received others. It follows, therefore, that the authority of the church is above that of any gospel.—To this Wicliff replied, that the evidence for the received gospels was so strong, and that for the rejected ones so weak, that the church could not have done otherwise than it did, without doing violence to reason. But the best argument, he said, if it were proper to avow it, for supporting the authority of the church, was the necessity of it to support the tyranny of the pope. This was what made it worth defending at the expense of truth. In another place, speaking on the same subject, he says, that the pope would not submit his actions to the same criterion, by which Christ was contented to have his actions tried. If I do not, says Christ, the works of my father which is in heaven, believe me not. But the pope's authority, it seems, must be acknowledged, though he manifestly does the works of the devil. Thus, says he, Christians are in greater thraldom than the Jews under the old law; and that liberty, by which Christ hath made us free, is, by the wickedness of designing men, changed into the most absolute spiritual bondage. The days, says he, I hope, will come, when men will be wise enough to shake from their necks the dominion of human ordinances; and disdain submission to any ecclesiastical injunctions, but such as are plainly authorised by the word of God.'

Early in the Reformation, a respectable party of the church of England contended for a more complete departure from the popish models of church government and discipline. Bishop Hooper, perhaps, led the way to the practical secession that afterwards took place, by refusing to be consecrated in the Roman pontificals. This was in the reign of Edward VI. On the persecutions that arose under queen Mary, a considerable number of the British exiles settled at Frankfort, and agreed to conduct their worship, without answering aloud after the minister, and without using the liturgy and surplice; to begin the public service with a general confession of sins, then to sing a psalm, after which the minister prayed for the divine assistance, and next proceeded to the sermon; after sermon, to use a general prayer for all estates, and particularly for England, at the end of which were subjoined the Lord's prayer, and a rehearsal of the articles of belief; then the people were to sing another psalm, and the minister to dismiss them with a blessing. Such was the order which they had unanimously adopted; and, having chosen a minister and deacons, they invited their dispersed brethren to join with them. In the year 1556 Dr. Cox joined them, with several of his friends; who interrupted the public service by answering aloud after the minister, and read the whole litany, in violation of the agreement upon which the congregation was formed. They out-numbered the first settlers, and, obtaining leave of the magistrates for the free use of king Edward's service-book, performed divine worship according to the rites that had been authorised by that prince. The original party, upon this, left the city of Frankfort, and removed to Basil and Geneva. Here commenced the distinction of Puritans and Conformists, by which the two parties were ever afterwards known, the former being called Conformists, on account of their compliance with the ecclesiastical laws of Edward VI., and the latter, Nonconformists and Puritans, from their insisting upon a form of worship of a purer kind, as they alleged.

On the accession of queen Elizabeth, the schism became more important. Dr. Cox was appointed bishop of Ely; and the standard of orthodoxy, according to this divine, and the majority of the bishops, was 'the queen's supremacy and the laws of the land;' whilst the Puritans contended for 'the decrees of provincial and national synods,' allowed and enforced by the civil magistrate; for neither party, it must be allowed, was for admitting full liberty of conscience, and freedom of religious profession.

Ministers were now obliged to comply with an act for the uniformity of common prayer and service in the church and administration of the sacraments; to subscribe a declaration of faith, issued by order of the archbishops and bishops, for the unity of doctrine; to take the oath of supremacy to the queen, &c. The question about habits was revived; and in 1566 these and several other ceremonies, imposed by law, compelled the puritans to an open separation. In

the following year they published other objections against the hierarchy and various ceremonies, for the use of which, they contended, there was no foundation in Scripture or antiquity. The leaders of this separation were chiefly beneficed persons of the diocese of London; who first assembled, with such of their flocks as chose to follow them, in woods and private houses, subjecting themselves to a variety of legal penalties and frequent imprisonment. The adherence of the puritans to Calvinistic principles seems, in no small degree, to have urged the established clergy at this time to adopt the intricate distinctions of Arminius on the subject of grace, free-will, &c. But several episcopal divines remained attached to the puritan system in the reign of James I.; and all these abettors of Calvinism, whether episcopal or presbyterian, were called doctrinal puritans. At length, according to Fuller (Church Hist. book ix. p. 97, book x. p. 100), the name was extended to stigmatise all those who endeavoured in their devotions to accompany the minister with a pure heart, or who were remarkably holy in their conversation.

Queen Elizabeth and James I. treated these early dissenters with that rigor which induced many of them to emigrate to the colonies. In the year 1629 they founded Massachusett's Bay. The colony of Connecticut was formed by emigrants of the same class in 1636, and that of New Haven by those who, in 1637, fled from the persecution of Laud, and the oppressions of the star-chamber and high commission courts. The puritans were afterwards not allowed to transport themselves to New England; we have seen, in the article CROMWELL, how singularly the future lord protector was then prevented expatriating himself; and many of them removed, with their families, to the Low Countries.

On the restoration of Charles II., in the year 1660, the name of Puritans, says bishop Burnet, was changed into that of Protestant Nonconformists, who were subdivided into Presbyterians, Independents, Anabaptists, and Quakers. At this time a second Act of Uniformity was passed, by which all who refused to observe the rites, and subscribe the doctrines, of the church of England, were entirely excluded from power. From this period until the reign of king William III. the Nonconformists were in a very precarious situation, sometimes involved in calamity and trouble, and at other times enjoying intervals of tranquillity, according to the varying temper of the court and ministry. But in the year 1689 the memorable bill for the toleration of all Protestant dissenters from the church of England, except impugners of the Trinity, passed in parliament almost without opposition, and delivered those who could comply with the conditions it imposed from the penal laws to which they had been so long subjected.

Fluctuations have taken place in the political treatment of dissenters since this period, and in the close of the reign of queen Anne the act of Occasional Conformity, which was pushed forward by the high-church party, threatened the extinction of their new liberties. But the accession of the present illustrious House of Brunswick to the throne of these realms has confirmed and enlarged them; and each of the successive monarchs has renewed and redeemed his pledge to keep the toleration act inviolate: and while the parties interested are still hopeful of the abrogation of all excluding statutes, on the subject of religion, they wait with patience the final conviction of the government and country as to the period of awarding their rights.

DISSENTIENT; a word literally signifying they dissent or disagree, prefixed to protests, or rather to the reasons of dissent, given in by protesting peers, in the upper House of Parliament, to be entered on the journals of the house.

DISSERTA'TION, *n. s.* Lat. *dissertatio*. A discourse; a disquisition; a treatise.

Plutarch, in his *dissertation* upon the Poets, quotes an instance of Homer's judgment in closing a ludicrous scene with decency and instruction.
Broome on the Odyssey.

I have known a woman branch out into a long extempore *dissertation* upon the edging of a petticoat, and chide her servant for breaking a china cup in all the figures of rhetoric. *Addison.*

The following relation is so curious and entertaining, and the *dissertations* that accompany it so judicious and instructive, that the translator is confident his attempt stands in need of no apology.
Johnson. Preface to Father Lobo's Voyage.

DISSE'RVE, *v. a.* } *Dis* and serve.
DISSE'RVICE, *n. s.* } To do injury to;
DISSE'RVICEABLE, *adj.* } to damage; hurt.
DISSE'RVICEABLENESS, *n. s.* }

Having never done the king the least service, he took the first opportunity to *disserve* him, and engaged against him from the beginning of the rebellion.
Clarendon.

All action being for some end, and not the end itself, its aptness to be commanded or forbidden, must be founded upon its serviceableness or *disserviceableness* to some end. *Norris.*

We shall rather perform good offices unto truth, than any *disservice* unto relaters who have well deserved. *Browne.*

Great sicknesses make a sensible alteration, but smaller indispositions do a proportionable *disservice*.
Collier.

Desires of things of, this world, by their tendency, promote or *disserve* our interests in another. *Rogers.*

DISSETTLE, *v. a.* *Dis* and settle. To unsettle; to unfix.

DISSEV'ER, *v. a.* *Dis* and sever. In this word the particle *dis* makes no change in the signification, and therefore, says Dr. Johnson, the word, though supported by great authorities, ought to be ejected from our language. To part in two; to break; divide; rend asunder; disunite.

Dissever your united strengths,
And part your mingled colours once again.
Shakspeare.

The *dissevering* of fleets hath been the overthrow of many actions. *Raleigh.*

Shortly had the storm so *dissevered* the company, which the day before had tarried together, that most of them never met again, but were swallowed up.
Sidney.

The meeting points the sacred hair *dissever*
From the fair head, for ever and for ever. *Pope.*

For surprise is only produced when any external irritations suddenly obtrude themselves, and *dissever* our passing trains of ideas. *Darwin.*

DIS'SIDENCE. *n. s.* } Lat. *dissideo.* Dis-
DIS'SIDENT, } cord; disagreement.

See the article DISSIDENTS.

DISSI'LIENCE, *n. s.* } Lat. *dissilio.* The
DISSI'LIENT, *adj.* } act of starting asun-
DISSI'LIATION, *n. s.* } der.

The air having much room to receive motion, the *dissilition* of that air was great.
Boyle's Spring of the Air.

DISSIM'ILAR, *adj.* } *Dis* and similar. Un-
DISSIM'ILARITY, *n. s.* } like; heterogeneous:
DISSIMIL'ITUDE. } want of similitude.

Thereupon grew marvellous *dissimilitudes*, and by reason thereof jealousies, heartburnings, jars, and discords. *Hooker.*

Simple oil is reduced into *dissimilar* parts, and yields a sweet oil, very differing from sallet oil.
Boyle.

The *dissimilitude* between the Divinity and images, shews that images are not a suitable means whereby to worship God. *Stillingfleet.*

As human society is founded in the similitude of some things, so it is promoted by some certain *dissimilitudes.* *Grew.*

The light whose rays are all alike refrangible, I call simple, homogeneal, and similar; and that, whose rays are some more refrangible than others, I call compound, heterogeneal, and *dissimilar.* *Newton.*

If the principle of reunion has not its energy in this life, whenever the attractions of sense cease, the acquired principles of *dissimilarity* must repel these beings from their centre. *Cheyne.*

Women are curious observers of the likeness of children to parents, that they may, upon finding *dissimilitude*, have the pleasure of hinting unchastity.
Pope's Odyssey, Notes.

Ideas of the same race, though not exactly alike, are sometimes so little different that no words can express the *dissimilitude.*
Johnson. Preface to Dictionary.

DISSIMULATION, *n. s.* } Lat. *dissimula-*
DISSIM'ULATING, *n. s.* } *tio.* See DISSEMBLE. The act of dissembling; hypocrisy; fallacious appearance or pretensions. See the extract from the Tatler.

Who coude tellen you the forme of daunces
So uncouth, and so freshe countenances,
Swiche subtil lokings and *dissimulings*,
For dred of jalous mennes apperceivings.
Chaucer. Cant. Tales.

Dissimulation is but a faint kind of policy; for it asketh a strong wit, and a strong heart, to know when to tell truth, and to do it. *Bacon.*

He added not; and Satan bowing low
His grey *dissimulation*, disappeared
Into thin air diffused. *Milton.*

Dissimulation may be taken for a bare concealment of one's mind; in which sense we commonly say, that it is prudence to dissemble injuries. *South.*

The learned make a difference between simulation and *dissimulation.* Simulation is a pretence of what is not, and *dissimulation* is a concealment of what is.
Tatler, 213.

DISS'IPATE, *v. a.* } Fr. *dissiper*; Span. and
DISS'IPABLE, *adj.* } Portug. *dissipar*; Ital.
DISSIPA'TION. *n. s.* } and Lat. *dissipare*, from *dis* and *seps*, *sepis*, a venomous serpent, because whatever is bitten thereby, putrifies.—Minsheu To disperse; scatter; destroy: dissipation is the act or habit of dispersing or wasting: applied figuratively also to the mind, and particularly the attention. Dissipable is an obsolete adjective for, easily dispersed, or liable to dispersion.

The heat of those plants is very *dissipable*, which under the earth is contained and held in; but when it cometh to the air it exhaleth.
Bacon's Natural History.

Abraham was contemporary with Paleg, in whose time the famous *dissipation* of mankind, and distinction of languages, happened.
Hale's Origin of Mankind.

It is covered with skin and hair, to quench and *dissipate* the force of any stroke, and retard the edge of any weapon. *Ray.*

Gold is a wonderful clearer of the understanding; it *dissipates* every doubt and scruple in an instant.
Addison.

I have begun two or three letters to you by snatches, and been prevented from finishing them by a thousand avocations and *dissipations.* *Swift.*

The parts of plants are very tender, as consisting of corpuscles which are extremely small and light, and therefore the more easily *dissipable.*
Woodward's Natural History.

The circling mountains eddy in,
From the bare wild, the *dissipated* storm.
Thomson.

This slavery to his passions produced a life irregular and *dissipated.* *Johnson. Savage's Life.*

DISSIPATION, in physics, an insensible loss or consumption of the minute parts of the body; or that flux whereby they fly off and are lost.

DISSIPATION, CIRCLE OF, in optics, that circular space upon the retina, which is taken up by one of the extreme rays issuing from an object. When the distance of an object from the eye is too small or too great for perfect or distinct vision, the rays of each pencil, issuing from the object, cannot be united at a point on the retina; consequently, the rays of each pencil will occupy a circular space upon the retina, which circle is called the circle of dissipation, because the rays of a pencil, instead of being collected into a central point, are dissipated all over this circle.

DISSIDENTS, a denomination applied in Poland to those of the Lutheran, Calvinistic, and Greek professions. The kings of Poland engaged by the pacta conventa to tolerate them in the free exercise of their religion, but they had often reason to complain of the violation of these promises. See POLAND.

DISSO'CIATE, *v. a.* Lat. *dissocio.* To separate; disunite; part.

In the *dissociating* action, even of the gentlest fire, upon a concrete, there perhaps vanish some active and fugitive particles, whose presence was requisite to contain the concrete under such a determinate form.
Boyle.

DIS'SOLUBLE, *adj.* } Lat. *dissolubilis.* Ca-
DISSOLUBIL'ITY, *n. s.* } pable of separation; having one part separable from another. Dissolubility is liableness to dissolution.

Nodules, reposed in cliffs amongst the earth, being hard and not so *dissoluble*, are left behind.
Woodward's Natural History.

Bodies seem to have an intrinsick principle of alteration, or corruption, from the *dissolubility* of their parts, and the coalition of several particles endued with contrary and destructive qualities each to other.
Hale's Origin of Mankind.

DISSOLVE', *v. a.* & *n.* } Lat. *dissolvere*, from *dis*, asunder, and *solvere*, to loose. To disunite the parts of a thing by moisture or by heat; to melt; liquefy: hence, figuratively, to destroy a union, compact, or delusion, as well as to dissipate obscurity or doubt. Dissolvent is having the power of dissolving; dissolver is synonymous with it as a substantive: dissolvible is, liable to liquefy or disperse by dissolution.

I haue a desier to be *dissolued* and to be with Crist, it is mych more bettre. *Wiclif. Filipensis* 1.

And I have heard of thee, thut thou canst make interpretations and *dissolve* doubts. *Dan.* v. 16.

If there be more, more woeful, hold it in;
For I am almost ready to *dissolve*,
Hearing of this. *Shakspeare. King Lear.*

She and I, long since contracted,
Are now so sure that nothing can *dissolve* us. *Id.*

By the king's authority alone, and by his writs, parliaments are assembled; and by him alone they are prorogued and *dissolved*, but each house may adjourn itself. *Bacon to Villiers.*

Down fell the duke, his joints *dissolved* asunder,
Blind with the light, and stricken dead with wonder.
Fairfax.

Witness these ancient empires of the earth
In height of all their flowing wealth *dissolved*.
Milton.

Angels *dissolved* in hallelujahs lie. *Dryden.*

The commons live, by no divisions rent;
But the great monarch's death *dissolves* the government. *Id.*

In man and viviparous quadrupeds, the food, moistened with the spittle, is first chewed, then swallowed into the stomach, where, being mingled with *dissolvent* juices, it is concocted, macerated, and reduced into a chyle. *Ray.*

As wax *dissolves*, as ice begins to run
And trickle into drops before the sun,
So melts the youth, and languishes away.
Addison's Ovid.

Such things as are not *dissolvable* by the moisture of the tongue, act not upon the taste. *Newton.*

Spittle is a great *dissolvent*, and there is a great quantity of it in the stomach, being swallowed constantly. *Arbuthnot.*

Fire, and the more subtle *dissolver*, putrefaction, by dividing the particles of substances, turn them black.
Id.

The snow *dissolved*, no more is seen,
The fields and wood, behold! are green.
Johnson.

Despotic love *dissolves* the bestial war. *Darwin.*

DIS'SOLUTE, *adj.* } Fr. *dissolu*; Italian, Span. and Port. *disoluto*; Lat. *dissolutus*, from *dis* and *solvere*, *solutus*, to loose. Unrestrained by law or morals; debauched; luxurious. Dissolution is more generally applied in the literal sense, and to death. Dissoluteness, to behaviour or manners: yet both occur in the latter sense; and dissolution is used by lord Bacon for the substance formed by dissolving a body.

DIS'SOLUTELY, *adv.*
DIS'SOLUTENESS, *n. s.*
DISSOLU'TION.

A giant huge and tall,
Who him disarmed, *dissolute*, dismayed,
Unawares surprised. *Faerie Queene.*

He determined to make a present *dissolution* of the world. *Hooker.*

Such stand in narrow lanes,
And beat our watch, and rob our passengers;
While he, young, wanton, and effeminate boy,
Takes on the point of honour, to support
So *dissolute* a crew. *Shakspeare. Richard II.*

I am as subject to heat as butter; a man of continual *dissolution* and thaw.
Id. Merry Wives of Windsor.

The life of man is always either increasing towards ripeness and perfection, or declining and decreasing towards rottenness and *dissolution*. *Raleigh's History.*

Weigh iron and aqua-fortis severally; then dissolve the iron in the aqua-fortis, and weigh the *dissolution*. *Bacon.*

Neither doth God say, I was the God of Abraham, Isaac, Jacob; but I am. The patriarchs still live, after so many years of *dissolution*.
Bp. Hall's Contemplations.

Yet, I deny not, but *dissolute* men, like unskilful horsemen, which open a gate on the wrong side, may, by the virtue of their office, open heaven for others, and shut themselves out. *Fuller.*

A longing after sensual pleasures is a *dissolution* of the spirit of a man, and makes it loose, soft, and wandering, unapt for noble or spiritual employments.
Bp. Taylor.

We expected
Immediate *dissolution*, which we thought
Was meant by death that day.
Milton Paradise Lost.

They cooled in zeal,
Thenceforth shall practise how to live secure,
Worldly, or *dissolute*, on what their lords
Shall leave them to enjoy. *Id.*

If we look into the common management, we shall have reason to wonder, in the great *dissoluteness* of manners which the world complains of, there are any footsteps at all left of virtue. *Locke.*

Is a man confident of wealth and power? Why let him read of those strange unexpected *dissolutions* of the great monarchies and governments of the world. *South.*

The true spirit of religion banishes indeed all levity of behaviour, all vicious and *dissolute* mirth; but, in exchange, fills the mind with a perpetual serenity. *Addison's Spectator.*

That mind is *dissolute* and ungoverned, which must be hurried out of itself by loud laughter or sensual pleasure, or else be wholly inactive. *Steele.*

Would they have mankind lay aside all care of provisions by agriculture or commerce, because possibly the *dissolution* of the world may happen the next moment? *Bentley.*

In the next place, Sir, I am clear that the act of union, reciting and ratifying one Scotch and one English act of parliament, has not rendered any change whatsoever in our church impossible, but by a *dissolution* of the union between the two kingdoms.
Burke.

A *dissolution* of all bonds ensued;
The curbs invented for the mulish mouth
Of headstrong youth were broken. *Cowper.*

DISSOLUTION, in physics, a general name for all reductions of concrete bodies into their smallest parts, without regard either to solidity or fluidity; though in the usual acceptation of the word among authors, it is restrained to the reduction

of solid bodies into a state of fluidity; which is more properly expressed by solution. See CHEMISTRY.

DIS'SONANCE, *n. s.* } Fr. *dissonance;* Ital.
DIS'SONANT, *adj.* } *dissonanza;* Lat. *dissonantia*, from *dis*, diversely, and *sonans*, *sonantis*, sounding. Harshness, or jargon of sounds; disagreement: dissonant is inharmonious; and hence incongruous; disagreeing; followed by *from*, and less correctly by *to*.

Though he nought fonde yet would he lie
Discordaunt er fro armonie,
And *dissonid* fro melodie;
Controve he would, and foule faile,
With hornpipis of Cornewaile.
Chaucer. Romaunt of the Rose.

Still govern thou my song,
But drive far off the barbarous *dissonance*
Of Bacchus and his revellers. *Milton.*

What can be more *dissonant from* reason and nature, than that a man, naturally inclined to clemency, should shew himself unkind and inhuman?
Hakewill on Providence.

With *to;* less properly.

When conscience reports any thing *dissonant to* truth, it obliges no more than the falsehood reported by it. *South.*

Dire were the strain, and *dissonant, to* sing
The cruel raptures of the savage kind. *Thomson.*

DISSUADE' *v. a.* } Fr. *dissuader;*
DISSUADE'R, *n. s.* } Span. *dessuadir;*
DISSUA'SION, } Lat. *dissuadere*:
DISSUA'SIVE, *adj.* & *n. s.* } *dis*, opposite, and *suadere*, to persuade. To dehort; divert from, by persuasion: dissuader is he who endeavours to do this; and dissuasion the act or means of doing it.

We submit to Cæsar, promising
To pay our wonted tribute, from the which
We were *dissuaded* by our wicked queen.
Shakspeare. Cymbeline.

Not diffident of thee do I *dissuade*
Thy absence from my sight.
Milton's Paradise Lost.

What is meant by *disswading;* it is making a man to change his opinion, and unfixing of the mind.
Bp. Taylor.

Endeavour to preserve yourself from relapse by such *dissuasions* from love, as its votaries call invectives against it. *Boyle.*

I'd fain deny this wish, which thou hast made;
Or, what I can't deny, would fain *dissuade.*
Addison's Ovid.

What more powerful *dissuasive* from suspicion, jealousy, and anger, than the story of one friend murdered by another in a duel. *Bp. Horne.*

DISSYL'LABLE, *n. s.* Διασυλλαβος. A word of two syllables.

No man is tied, in modern poetry, to observe any farther rule in the feet of his verse, but that they be *dissyllables;* whether spondee, trochee, or iambique, it matters not. *Dryden.*

He (Shakspeare) seems to have been the very original of our English tragical harmony; that is, the harmony of blank verse, diversified often by *dissyllable*, and trissyllable terminations. *Dennis.*

DISTAFF, *n. s.* Sax. dæstaff, from *diege*, the thigh, and staff, 'because females while spinning fit it to the thigh.'—Minsheu. The staff from which the flax is drawn off in spinning: used as an emblem of the sex.

Weave thou to end this web which I begin;
I will the *distaff* hold, come thou and spin.
Fairfax.

In sum, proud Boreas never ruled fleet,
Who Neptune's web on danger's *distaff* spins,
With greater power than she did make them wend
Each way, as she that age's praise did bend.
Sidney.

See my royal master murdered,
His crown usurped, a *distaff* in the throne.
Dryden.

In my civil government some say the crosier, some say the *distaff*, was too busy.
Howel's England's Tears.

I can no more pardon a fair one for endeavouring to wield the club of Hercules, than I could him for attempting to twirl her *distaff.* *Goldsmith.*

DISTA'IN, *v. a.* *Dis* and stain. To stain; to tinge with an adventitious color; hence to blot or obliterate.

For certainly all these mowe out suffice
To' apperin with my ladie in no wise,
For as the sunne woll the fire *distain*,
So passith all my ladie soverain.
Chaucer. Legend of Women.

He understood,
That lady, whom I had to me assigned,
Had both *distained* her honourable blood,
And eke the faith which she to me did bind.
Faerie Queene

The worthiness of praise *distains* his worth,
If he that's praised himself bring the praise forth.
Shakspeare.

Nor ceased his arrows, till the shady plain
Seven mighty bodies with their blood *distain.*
Dryden's Virgil.

Place on their heads that crown *distained* with gore,
Which those dire hands from my slain father tore.
Pope.

DISTASTE', *n. s.* } *Dis* and taste. Dis-
DISTASTE'FUL, *adj.* } relish; aversion of the palate; disgust: the verb being derived from the noun, and both often applied figuratively.

Dangerous conceits are in their nature poisons,
Which at the first are scarce found to *distaste*,
But, with a little act upon the blood,
Burn like the mines of sulphur.
Shakspeare. Othello.

After *distasteful* looks,
With certain half-caps, and cold moving nods,
They froze me into silence. *Id. Timon.*

The king having tasted of the envy of the people, for his imprisonment of Edward Plantagenet, was doubtful to heap up any more *distastes* of that kind by the imprisonment of De la Pole also.
Bacon's Henry VII.

It is in the general behalf of society that I speak, at least the more judicious part of it, which seems much *distasted* with the immodest and obscene writing of many in plays. *Ben Jonson.*

The ground might be the *distasteful* averseness of the Christian from the Jew. *Browne.*

On the part of heaven,
Now alienated, distance and *distaste*,
Anger, and just rebuke.
Milton's Paradise Lost.

None but a fool *distasteful* truth will tell;
So it be new and please, 'tis full as well.
Dryden.

Distasteful humours, and whatever else may render the conversation of men grievous and uneasy to one another, are forbidden in the New Testament.
Tillotson.

I am unwilling to believe that he doth it with a design to play tricks, and fly-blow my words to make others *distaste* them. *Stillingfleet.*

With stern *distaste* avowed,
To their own districts drive the suitor crowd.
Pope's Odyssey.

DISTANCE, *v. a.* & *n. s.* } Fr. *distance*;
DIS'TANT, *adj.* } Span. *distancia*; Ital. *distanza*; Lat. *distantia*, from *dis*, asunder, and *stans*, *stantis*, standing. The extent of space between two standing bodies. The verb seems here derived from the noun. Distant is, remote in place, time, or nature; and in any degree: hence, not obvious; not intelligible.

We come to see fight; to see thy pass, thy stock, thy reverse, thy *distance*.
Shakspeare. Merry Wives of Windsor.

Banquo was your enemy,
So is he mine; and in such bloody *distance*,
That every minute of his being thrusts
Against my nearest of life. *Shakspeare. Macbeth.*

A good merchant never demands out of *distance* of the price he intends to take. If not always within the touch, yet within the reach of what he means to sell for. *Fuller.*

This heaven which we behold
Distant so high. *Milton.*

On the part of heaven,
Now alienated, *distance* and distaste,
Anger, and just rebuke, and judgment given. *Id.*

This was the horse that ran the whole field out of *distance*, and won the race. *L'Estrange.*

We have as much assurance of these things, as things future and at a *distance* are capable of.
Tillotson.

That which gives a relievo to a bowl, is the quick light, or white, which appears to be on the side nearest to us, and the black by consequence *distances* the object. *Dryden's Dufresnoy.*

I hope your modesty
Will know what *distance* to the crown is due.
Dryden.

Distance is space considered barely in length between any two beings, without considering any thing else between them. *Locke.*

It was one of the first distinctions of a well-bred man to express every thing obscene in modest terms and *distant* phrases. *Addison's Spectator.*

Cæsar is still disposed to give us terms,
And waits at *distance* till he hears from Cato.
Addison.

If a man makes me keep my *distance*, the comfort is, he keeps his at the same time. *Swift.*

These dwell at such convenient *distance*,
That each may give his friend assistance. *Prior.*

I help my preface by a prescript, to tell that there is ten years *distance* between one and the other. *Id.*

Each daring lover, with adventurous pace,
Pursued his wishes in the dangerous race;
Like the swift hind the bounding damsel flies,
Strains to the goal; the *distanced* lover dies. *Gay.*

'Tis by respect and *distance* that authority is upheld.
Atterbury.

The wondrous rock the Parian marble shone,
And seemed to *distant* sight of solid stone. *Pope.*

The senses will discover things near us with sufficient exactness, and things *distant* also, so far as they relate to our necessary use. *Watts's Logick.*

The worse living authors fare now, the better they will succeed with posterity; for the critics love the sport too well to hunt any but those who can stand a good chase; and authors are the only objects in nature, which are magnified by *distance*, and diminished by approach. *Cumberland.*

Be silent! How the soldiers' rough strain seems
Softened by *distance* to a hymn-like cadence!
Listen! *Byron.*

DISTEM'PER, *v. a.* & *n. s.* } *Dis* and temper.
DISTEM'PERATE, *adj.* } To disorder; disease;
DISTEM'PERATURE, *n. s.* } disturb; render disaffected; to temper colors anew. As a substantive, it expresses disorder; disproportion; or disease of any kind; and has the same use among painters as the adjective. Distemperate is, immoderate; and distemperature, habitual or extreme disorder; violence.

Tell how the world fell into this disease,
And how so great *distemperature* did grow.
Daniel.

Thy earliness doth me assure
Thou art uproused by some *distemperature*.
Shakspeare.

There is a sickness,
Which puts some of us in *distemper*; but
I cannot name the disease, and it is caught
Of you that yet are well. *Id. Winter's Tale.*

Young son, it argues a *distempered* head,
So soon to bid good-morrow to thy bed.
Id. Romeo and Juliet.

Aquinas objecteth the *distemperate* heat, which he supposeth to be in all places directly under the sun.
Raleigh's History.

The true temper of empire is a thing rare, and hard to keep; for both temper and *distemper* consist of contraries. *Bacon.*

I was not forgetful of those sparks, which some men's *distempers* formerly studied to kindle in parliament. *King Charles.*

He *distempered* himself one night with long and hard study. *Boyle's History of Fluids.*

Distempered zeal, sedition, cankered hate,
No more shall vex the church and tear the state.
Dryden.

They heighten *distempers* to diseases.
Suckling.

Sin is the fruitful parent of *distempers*, and ill lives occasion good physicians. *South.*

They were consumed by the discommodities of the country, and the *distemperature* of the air. *Abbot.*

When I behold a fashionable table set out in all its magnificence, I fancy that I see gouts and dropsies, fevers and lethargies, with innumerable other *distempers*, lying in ambuscade among the dishes.
Addison.

A night of fretful passions may consume,
All that thou hast of beauty's gentle bloom,
And one *distempered* hour of sordid fear
Print on thy brow the wrinkles of a year.
Sheridan.

DISTEMPER, in painting, a term used for working up of colors with something besides water or oil. If the colors are prepared with water, that kind of painting is called limning; and if with oil, is called painting in oil, and simply painting. If the colors are mixed with size, whites of eggs, or any such proper glutinous or unctuous matter, and not with oil, then they say it is done in distemper.

DISTEND', *v. a.* } Fr. *distendre*;
DISTENT', *n. s.* & *past. part.* } Lat. *distendere*;
DISTEN'TION, *n. s.* } from *dis*, asunder, and *tendere*, to stretch. To stretch breadth-wise.

Some others were new driven and *distent*
Into great ingots and to wedges square,
Some in round plates withouten moniment.
Spenser.

Those arches are the gracefullest, which, keeping precisely the same height, shall yet be distended one fourteenth part longer, which addition of *distent* will confer much to their beauty, and detract but little from their strength. *Wotton.*

Thus all day long the full *distended* clouds
Indulge their genial stores. *Thomson.*

Wind and *distention* of the bowels are signs of a bad digestion in the intestines; for in dead animals, when there is no digestion at all, the *distention* is in the greatest extremity. *Arbuthnot.*

DISTICH, *n. s.* Fr. *distique;* Ital. Span. and Port. *disticho;* Lat. *distichon;* Gr. δίστιχον, a song of two verses, i.e. δυω two, and στιχος a verse, from στιχω to step, because ancient verses were measured by the steps. A couplet; a couple of lines; an epigram consisting only of two verses.

The French compare anagrams, by themselves, to gems; but when they are cast into a *distich*, or epigram, to gems enchased in enamelled gold.
Camden's Remains.

The bard, whose *distich* all commend,
In power, a servant; out of power, a friend.
Pope.

DISTICHIASIS, in surgery, a disease of the eye-lids, when under the ordinary eye-lashes there grows another extraordinary row of hair, which frequently eradicates the former, and pricking the membrane of the eye, excites pain, and brings on a defluxion. It is cured by pulling out the second row of hairs with nippers, and cauterising the pores out of which they issued.

DISTI'L *v. a.* & *v. n.*
DISTILLA'TION, *n. s.*
DISTIL'LATORY, *adj.*
DISTI'LLER, *n. s.*
DISTI'LLERY, *n. s.* & *adj.*
DISTI'LMENT.

Fr. *distiller;* Sp. *destilar;* Ital. *destillare;* Lat. *distillare*, from *stillo;* Gr. σταλαζω, to drop. To let fall in, or reduce to, drops; to extract spirit in drops by a peculiar process; to diffuse. As a neuter verb, to drop, or fall in drops; to flow gently; to use a still. Distillation is the art of distilling; distillatory, belonging to that art. Distiller, one who practises it: and distillery, the place of distilling; or, as an adjective, belonging to such a place. Distilment is used by Shakspeare for that which is produced by distillation.

They pour down rain, according to the vapour thereof, which the clouds do drop and *distil* upon man abundantly. *Job.*

Have I not been
Thy pupil long; Hast thou not learned me how
To make perfumes, *distil*, preserve? *Shakspeare.*

There hangs a vapourous drop, profound;
I'll catch it ere it comes to ground;
And that, *distilled* by magick slights,
Shall raise up artificial sprights. *Id.*

Upon my secure hour thy uncle stole,
And in the porches of mine ears did pour
The leperous *distilment*. *Id.*

The Euphrates *distilleth* out of the mountains of Armenia, and falleth into the gulph of Persia.
Raleigh's History.

Now, gentlemen, I go
To turn an actor, and a humourist,
Where, ere I do resume my present person,
We hope to make the circles of your eyes
Flow with *distilled* laughter. *Ben Jonson.*

Besides those grosser elements of bodies, salt, sulphur, and mercury, ingredients of a more subtle nature, extremely little, and not visible, may escape at the junctures of the *distillatory* vessels. *Boyle.*

The dew, which on the tender grass,
The evening had *distilled*,
To pure rose-water turned was,
The shades with sweets that filled.
Drayton.

From his fair head
Perfumes *distil* their sweets. *Prior.*

Water by frequent *distillations* changes into fixed earth. *Newton.*

Swords by the lightning's subtle force *distilled*,
And the cold sheath with running metal filled.
Addison.

When you set about composing, it may be necessary for your ease and better *distillation* of wit, to put on your worst clothes, and the worse the better.
Swift. Advice to a young Poet.

In vain kind seasons swelled the teeming grain;
Soft showers *distilled*, and suns grew warm in vain.
Pope.

The Arabians invented *distillation;* and thus, by obtaining the spirit of fermented liquors in a less diluted state, added to its destructive quality. *Darwin.*

By act of parliament, *distillers* are not at liberty to draw off any low wines before they have charged their wash-stills with wash or wort. *Hey's Gauger.*

We shall only here remark, that when a wash-back, or other *distillery* utensil, cannot be accurately measured by any other mode, recourse must be had to the method of equidistant ordinates. *Id.*

DISTILLATION is the art of separating the volatile and spirituous from the fixed and watery parts of fermented liquors.

When a fluid which has undergone the vinous fermentation is exposed to the action of heat, the vapor which arises from it is, when collected and condensed by the reduction of its temperature, again converted into a fluid: but the fluid thus obtained is found to have different properties to that from which it was derived, and it receives the name of spirit. This spirit consists of water, and a peculiar fluid called alcohol. Alcohol, in combination with more or less water, and flavored by the aroma of the different substances from which it is obtained, forms brandy, rum, geneva, and all the various descriptions of spirit known in commerce. The art of the distiller consists in selecting the most convenient mode of heating the fermented fluid, and of condensing the vapor it affords, while he prevents the intermixture with his products of whatever would injure their flavor. To accomplish these purposes, although they are apparently simple, it is found that great care and skill are required.

The distillations performed by the chemist, with the retort, the alembic, the lamp-furnace, the pneumato-chemical and Woulfe's apparatus, for obtaining gaseous and volatile products in general, are essentially the same as the distillations conducted for the commercial purpose of obtaining spirit; but the scale is different, the chemist having his whole apparatus so completely

under his eye that he can adjust the heat and other circumstances with much nicety. In using, for example, when he has vapor to condense, the lamp-furnace, a wet sponge placed on the beak of the retort will suffice: but the commercial distiller requires, for the purpose of condensation, a large convoluted tube, passing through an immense body of water, which must be constantly renewed: the difference of scale, therefore, requires more than a mere enlargement of the apparatus, and there has in fact been found ample scope for improvements in the art.

The quantity and excellence of the spirit produced by the French, in consequence of the alterations they have made in the old method of distilling (the most improved form of which, by Saintmarc, we shall presently describe), have decisively shown the value of the new plans, which may be adopted without the disadvantage of increasing the first cost or complexity of the apparatus. They consist in the application of Woulfe's apparatus to this purpose. Wine being put into the boiler, and into all the intermediate receivers between the boiler and the worm, the tube from the boiler plunges into the wine of the first receiver, to which it communicates sufficient heat to raise its contents in vapor: this vapor has the same effect on the wine of the next receiver; and after the continuation of the process through as many receivers as may be thought proper, the whole of the vapor finally extricated is condensed in the usual way by passing through a worm. By this truly ingenious apparatus, spirit of various degrees of concentration may be obtained at one operation, according as the product of the first, the second, or any other receiver is taken; the consumption of fuel is extremely small, the product excellent, as well as greater in quantity than by any other means; and by using water instead of wine, in the boiler, the possibility of an empyreumatic taste is prevented.

In distilling from grain an oil is apt to come over, which injures the taste of the spirits; it is usual to keep it back by adding a little sulphuric acid to the wash.

The comparative salubrity of the spirit or geneva made in Holland is notorious, and it has been supposed that nothing like it can be produced in this country; but it appears to be entirely the result of the care they take in their processes. They use the most perfect grain, and use it only when perfectly malted, aware that a fourth part more spirit is obtained from such grain than from that of which the germination has been checked too soon, or suffered to continue too long. The best Hollands is prepared from wheat, which is the fittest grain for this use, and is more productive than barley; but rye yields about one-third more spirit than wheat, and is more extensively used in Holland. The fermentation is continued about three days: the first distillation is extremely slow, and the observation of this point is essential; the second distillation or rectification is done with juniper berries. The most rigid cleanliness is observed, and the vessels are cleansed with lime-water instead of soap, which would give the liquor a urinous taste. They use the rye grown on a calcareous soil, and never, if they can avoid it, that of fat clayey ground: it is Prussian rye they employ. A little malt added to rye improves the flavor, but not the quantity of the spirit.

The substances from which spirit is obtained are usually barley, wheat, oats, rye, sugar, or molasses. In countries where the grape ripens in the open air, wine is distilled for this purpose: hence the superiority of the brandies of France; the spirit afforded by good wines containing the finest aroma of all products capable of yielding alcohol. When grain is used it is malted according to the usual process, like barley for brewing; and the fermentation is conducted in the same manner. After fermentation, the fluid intended to be distilled is called wash, and it is ready for the still.

A still consists of a boiler, which contains the wash; and a tube, in passing through which the vapors are condensed: the tube is convoluted, in order that it may have a great length in a moderate compass, and it is thence called the worm. The boiler formerly used was a cylinder, the height of which was in general one-half greater than its diameter; but the French, who have always been foremost in the improvements which this art has received, have introduced a much superior form. The height of the boiler has been considerably diminished, its width augmented, and instead of being cylindrical it widens upward gradually to within about three or four inches of the top; there the sides are curved into an arch, and become narrower. Hence its form is in fact similar to that of a common tea-kettle: the mouth *c d*, as is shewn in plate DISTILLATION, is of the same diameter as the bottom *a b*. To the boiler is fitted a conical head, in the interior of which, round the lower edge, is a channel, destined to receive the liquid condensed against the sides, and which, instead of returning to the boiler, is conveyed into the worm. In the old construction the head communicated with the worm by an inclined tube of a very small diameter; but now the tube in this situation, at its base *f g*, is as wide as the head, and diminishes in diameter as it approaches the worm, into which it opens. Another important difference, between the improved boiler and the old one, consists in the shape of the bottom: the old ones were flat; this is concave. By this means the heat received is nearly equal at every point directly exposed to the fire: and, as the bottom is convex within, the sediment from the wash falls round its edge, where, from its resting on the brick-work and not receiving the direct heat, it is not liable, from being burnt, to give an empyreumatic taste to the spirit. Two inches of the circumference of the bottom rest on brick-work. The boiler is filled by the aperture *o*.

In the old construction of the furnace the heat was applied only to the bottom of the boiler; and a further loss was sustained by placing, as is still common in furnaces generally, the centre of the grate under the centre of the boiler: without reflecting that the stream of air towards the chimney always carries the heat and flame in an oblique direction towards the end of the boiler. At present the end of the grate next the chimney is not placed further back than the middle of the boiler, and the heated air is conducted round the

boiler before it passes off, by which the whole mass of fluid in the boiler is heated at once, and the heat may be maintained with great regularity, while a much less quantity of fuel will suffice. The brick-work surrounding the boiler reaches as high as the circle *k k*.

The worm is generally made of tin or pewter, and is the same as that in common use, except that at the commencement *l*, where it is connected with the beak of the head of the boiler, it is wider than they were formerly made, and tapers gradually towards the discharging extremity *m*. The reason of this is evident, because vapor, only partly condensed, requires more room than where the whole is fluid. The refrigeratory, or vessel A B, is kept constantly filled with cold water; this is effected by a tube *n*, which descends and opens nearly at the bottom of it, and brings a supply of cold water from a greater elevation; while another tube, *r*, conveys the hot water with equal rapidity from the top. By this means the condensation is so complete, that the spirit discharged at *m* exhales little or no odor. As it is often not possible to have the water from a greater elevation than the refrigerator, without raising it by mechanical means, the following plan, by Alexander Johnston, is highly entitled to attention, as in it the syphon is applied to the worm-tube as a refrigerator; and water is conveyed in any quantity to a worm-tub of the largest dimensions, if perfectly air-tight; it is represented at in the same plate A, is the feed pipe of cold water. B, the hot water, or waste pipe, the end of which must be abouttwo feet below the feed pipe, to make it act with full effect.

When the work is commenced, the cocks must be shut, and the tub filled through a hole at the top, and of course, both pipes: and when full, the hole at the top is to be stopped, and the cocks opened together; the water will then commence running, and continue as long as the supply holds good, as it acts in every respect on the principle of a syphon. By this means pumps, horse-mills, and other machinery, are rendered unnecessary for that purpose. The application of this improvement is simple, and executed at a very little expense. The saving for the city of Dublin alone, is calculated at upwards of 100 horses per annum.

With respect to the usual mode in which distillation is conducted in the great public distilleries, the most interesting account that has been communicated to the public, is that contained in the deposition of James Forbes, of Dublin, who was for many years concerned in a large distillery. It is from the Appendix to the Fifth Report of the Commissioners of Enquiry into the Fees, &c., received in the public offices of Ireland; which report was printed by order of the house of commons.

'The corn is first ground, then mashed with water, and the worts, after being cooled, are set for fermentation, to promote which, a quantity of barm is added to them, and they become wash; the wash is then passed through the still, and makes singlings, and these, being again passed through the still, produce spirits; the latter part of this running, being weak, is called feints. When singlings are put into the still, a small quantity of soap is added, to prevent the still from running foul; a desert spoonful of vitriol well mixed with oil is put into a puncheon of spirits, to make them show a bead when reduced with water: this is only done with spirits intended for home consumption, and no vitriol is used in any other part of the process. In this distillery, the former practice was to use about one-fourth part of malt, and the remainder a mixture of ground oats and barley, and oatmeal; latterly the custom has been to use only as much as would prevent the kieve (mash-vat) from setting. He had found that malt alone produced a greater quantity of spirits, than the mixture of malt and raw corn of the same quality with that of which the malt had been made. He generally put from fifty to fifty-four gallons of water to every barrel of corn of twelve stone (14 lb. to the stone). Each brewing was divided into three mashings, nearly equal: the produce of the two first was put into the fermenting backs; and the produce of the last, which was small worts, was put into the copper for the purpose of being heated, and used as water to the next day's brewing, when as much water was added as would make, with the small worts of the brewing, fifty-four gallons to each barrel of the corn. The kieves were so tabulated, that he always knew the quantity of worts which would come off at each mashing. Their strength he ascertained by Saunders's saccharometer, and at the above proportions he obtained, from a mixture of the two first worts, an increase of gravity from twenty pounds to twenty-two pounds per barrel, of thirty-six gallons, above water-proof, at a temperature of about 88°. The small worts gained at the same temperature about six pounds. The grain, after the last worts were off, retained nearly the same bulk as when put into the kieve; the whole of the grain was put in at the first mashing; he never knew any grain to be added to the second mashing. The worts of the first and second mashing were run through the mash-kieve into the under-back, in which state they were usually found to correspond with the computation made in the mash-kieve and under-back, in the latter of which a correct gauge might be taken of them. He usually commenced brewing at six o'clock in the morning: the first worts were run off into the under-backs, and required from an hour to an hour and a half to be forced up into the cooler; the second worts came off at the end of two hours from the discharge of the first, and required about the same time to pass into the coolers. The small worts were generally let off late at night; and being then, or early on the following morning, put into the copper to be used for the next brewing, were seldom shown on the coolers. He thinks that any decrease of the worts by evaporation whilst on the coolers, must have been very inconsiderable; and that a correct gauge of the worts may be taken in the coolers as well as in the underbacks. The quantity of wash in the backs was found to be nearly correspondent with that of the strong waters which had been on the kieve and in the cooler. The fermentation of the worts was produced by means of yeast, and was in general so contrived as to be apparently kept

up for the full time allowed by law (six days): he has, however, usually had his wash ready for the still in twenty-four hours from the time in which it was set. Backs are renewed in two ways; either by additions made to them from other backs in the distillery, each supplying a certain portion of wash to the back which is next before it in the order of fermentation, while the newest and least fermented wash is replenished by worts, or, when the fermentation is down, by an entire substitution of worts. He has ordinarily, in the course of work, charged a 500 gallon still with wash, and run it off in twenty to twenty-three minutes: he has seen a 1000 gallon still charged and worked off in twenty-eight or thirty minutes. He understands that it is now the practice of some distillers, to heat the wash nearly to the state of boiling before the still is charged with it; by which means he believes the process to be accelerated by three or four minutes. He has seen a 1000 gallon still charged with singlings, and worked off in from forty to fifty minutes, and thinks a 500 gallon still requires nearly an equal time. Feints from pot-ale (the name given to completely fermented wash) usually are run off in from six to seven minutes; making allowance for every delay, about six charges of spirits may be run off from a still of 500 gallons' contents, each charge estimated at 150 gallons. The feints were always put back into the pot-ale receiver; twenty gallons of feints is the usual quantity run from a 500 gallon still charged with singlings; he thinks there is more spirit extracted from feints than from pot-ale; there was no delay between one charge of pot-ale and another, or between one of singlings and another; the still could be cleansed in less than a minute; it very rarely occurred that the ordinary accidents which happened to the still delayed the work to any considerable degree. The still is never charged with wash beyond about seven-eighths of the still, nor with singlings beyond about four-fifths, exclusive of the head. The estimated produce (according to which the duty may be charged) is one gallon of singlings from three gallons of wash, and one gallon of spirits from three gallons of singlings, but it is very frequently somewhat more. Previous to the regulation (of Excise) which took place in June, 1806, from a still of 540 gallons, which is charged with 2075 gallons of spirits weekly, he has frequently drawn 530 gallons in one week, and thinks 500 gallons to be a fair average. He usually made spirits about fourteen per cent. above proof, by Saunders's hydrometer. Spirits exported by him from twelve to fourteen per cent. above proof by Saunders' and Hyatt's hydrometer, were charged in London at from twenty-four to twenty-six gallons per cent. Before he sent them to the custom-house, he either reduced them with water, or drew them at that strength from the still. To every six gallons of strong spirits, one gallon of water was added in the distillery, which reduced them to the strength usual for exportation. The reduced spirits are permitted to the king's warehouses, and the distiller given a credit for a decrease of stock equal to the quantity so permitted; by these means he has one gallon of private spirits to dispose of for every gallon of water mixed with the spirits exported; besides this, the distiller draws back the allowance given in lieu of the malt-duty on every gallon of water added: when he warehoused spirits with the intention of afterwards using them for home consumption, he left them at their full strength.'

The absence of improvement in the process of distillation, as well as in the apparatus for effecting it, in this country, may be chiefly traced to the shackles which have proceeded from the regulations of excise, adopted and enforced for the protection of the revenue. Whether those regulations may have been indispensably requisite to that end, is, perhaps, very questionable; but it is quite certain that they have had the effect of restraining those extensive improvements in this branch of science and business, which have been almost universally accomplished, where the inventive genius of our countrymen has had free scope in the application of its powers to practical results. This is especially visible on a comparison of the means employed in France for the improvement of this branch. With an unlimited supply of the grape, a material certainly calculated to afford one of the finest spirits, they are enabled, almost at will, to effect such improvements in its quality as result from changes of process, and the adoption of superior apparatus; since, although in some respects under certain revenue regulations, they are not enforced in a manner calculated to prejudice the exercise of talent, whether mechanically or chemically applied to the art.

In the English language, too, there scarcely exists a treatise of any value on this subject; and that which has been published is little more than translations from works in the French language. There the scientific investigations of such men as Lavoisier, Chaptal, Gay Lussac, and Thenard, have laid a sure foundation for the more practical illustrations of Macquer, Dubrunfaut, Dubuisson, and others of less note, who have sent forth to the world the result of their labors.

With names as high on the list of science as our countrymen Davy, Woollaston, Dalton, Henry, Thomson, Ure, and Black, and with some of the most important departments of the art of distillation, up to the point of fermentation, as well understood, and as extensively practised as in France, the paucity of information on the subject generally, in this country, is not a little surprising. The French distillers have brought to notice several stills of curious construction, which have had for their object the saving of time and fuel, and the production of a spirit of superio. strength and good quality. In some of these perpetual distillation has been aimed at, but it cannot be said with success. Indeed, it is difficult to conceive that the elements to be converted, and the practice necessary for their conversion, can be so nicely combined and adjusted as to bring about such a result, without a most elaborate and expensive series of machinery and vessels; costly in themselves, not easy of management, and leading to the risk of considerable loss, from some of those inconveniences and irregularities to which all complicated apparatus are subject.

A still has lately been brought forward, which

is stated to be coming into extensive use, and to comprise all the advantages of perpetual distillation without its disadvantages; uniting moderate cost, the employment alike of a single vessel and a single operation, and the most perfect facility of management, with great economy of time, fuel, and other items of expense; and, which must be a primary object with all distillers, with the production of a fine and potent spirit. It has been introduced by two French gentlemen, M. Alégre, and M. Saintmarc; and is patented in this country in the name of the latter.

On a view of the plans and descriptions of this apparatus, there seems little reason to doubt its powers and advantages, as described; and, assuming the truth of the facts stated with regard to those powers as proved in practice, the invention is entitled to great praise; and must effect an extensive revolution in distillation, both in this country and in its colonies.

The plate of DISTILLATION presents a series of figures, exhibiting the construction and practical operation of this interesting combination of chemical and mechanical power.

Fig. 1 represents a sectional view of the still, with its furnace, and an elevation or outside view of the refrigerator, or worm tub. Figs. 2, 3, and 4, are plans of three portions of the still. Fig. 5 is a perspective view of one of the double tubes or pipes. Fig. 6 is an elevation of its front exterior, and fig. 7 is an elevation of its back exterior.

FIGURE I.

A. THE FIRE-PLACE or FURNACE, above which the still is placed.

B. EIGHT COPPERS or BOILERS, surmounting each other, constituting the apparatus or still, in the form of a column or cylinder, and numbered 1 to 8; the different coppers or compartments being put together by flanches and bolts.

C. (vide fig. 6 and 7), OPENINGS or MANHOLES, tightly closed by screw boxes, or otherwise, calculated, when the still is of large diameter, to admit a person into the several coppers, No. 1 to 7, for the purpose of cleaning or repairing them; or, when on a smaller scale, intended to admit a person's arm for the same object.

D. AN EXTERIOR VESSEL, or INTERMEDIATE WASH CHARGER, surrounding the upper compartment of the still; and calculated to contain a quantity of wash equal to the proper charge of one copper.

E. SUPPLY PIPE communicating from the general wash charger, or vessel containing the liquid to be distilled, to the exterior vessel D; and furnished with a cock for the purpose of turning the wash into that vessel.

F. A PLUG or VALVE fixed in the head of a pipe extending from the bottom of the vessel D into the lower part of the copper, 7; which plug or valve is raised by the aid of

G. A LEVER AND FULCRUM for the purpose of discharging the wash contained in the vessel D into the copper 7; from whence, as it reaches the upper end of the pipes H, it flows down from copper to copper, until it reaches No. 2; a quantity being displaced from the surface of the liquor in each copper equal to that which is thrown in from the copper next above.

H. FIVE PIPES, communicating from the copper, fig. 7 to fig. 6, and so on in succession, from vessel to vessel, down to fig. 2, extending from the level of the wash in one copper, marked by dotted lines to nearly the bottom of the copper below, in order to displace the warmest liquor, as shown in the description of G.

I. (Vide figs. 6 and 7), SIX PIPES FURNISHED WITH COCKS, communicating respectively from one copper to that next below, by which all the wash in the several coppers, from fig. 7 downwards, may be conveyed into the lower coppers, and finally drawn off from the lowest vessel.

K. (Vide figs. 6 and 7), SMALL TRIAL COCKS IN COPPERS 1 and 2, which, on being turned, indicate when those coppers are charged to the proper height, as denoted by the dotted lines on the same level as these cocks. They serve also as valves to admit air when the liquor is drawn off. A similar cock is likewise placed in copper, fig. 3, for the purpose last mentioned.

L. (Vide fig. 6), A SMALL PROOF COCK, placed vertically near the roof of the copper, No. 1, which, on being turned, determines by the application of a lighted taper or candle, whether or not there remains any portion of alcohol in this copper or boiler.

M. A DISCHARGE PIPE AND COCK to carry off the spent wash from the copper, fig. 1, when the spirit has distilled from it. This cock discharges down to about one inch above the crown, or highest part of the copper; and, in consequence, it is not necessary to damp the fire when it is opened.

N. A SECOND DISCHARGE PIPE AND COCK in the lowest part of the bottom, which carries off the whole contents of the copper; and, when opened, will generally require the fire to be damped, to prevent burning the bottom.

O. TEN DOUBLE TUBES or PIPES, of which five are fixed on the roof of copper 1, and five on that of 2. These pipes are closed at the top, and have openings in the upper part of the inner, communicating with the outer one. The vapor produced from the wash in copper 1, passes through the five double tubes on the roof of that copper into the copper 2, by rising up the inner tubes, passing therefrom through the openings at the upper part thereof, and descending down the outer tubes, discharging itself into the liquid in copper No. 2, where it becomes condensed. In like manner the vapor produced in the last mentioned copper passes up the double tubes on the roof thereof, into the copper fig. 3. (For a better description of these double tubes, vide the perspective view of one of them in fig. 5; and for the plan of the coppers containing them, vide fig. 4, and their respective explanations given below).

P. FIVE SEMISPHERICAL VESSELS or DOMES (in French, CALOTTES), constructed upon, and tightly jointed to, the centres of the roofs of the several coppers, No. 3 to 7, both inclusive. These domes, except the highest, are surrounded with wash; but have internal communication only with each other, by means of pipes fixed on their centres, which pass into the pipes Q, next described.

Q. FIVE DOUBLE TUBES or PIPES (of the same

kind as those marked O.), which are tightly fixed on the centres of the roofs of the coppers Nos. 3 to 7, and stand within the domes last described. The vapor described above (O) to have reached the copper No. 3, becomes condensed in the wash contained therein. The vapor generated in this copper passes through the double tube Q into the dome which encloses it, and so in succession, through the several tubes and domes above, until it reaches the dome on the roof of the copper No. 7, where it finally passes off into

R. A LARGE PIPE, which conveys it to

S. A WORM TUB, or REFRIGERATOR (of which an elevation or outside view only is given in the drawing), through

T. A WORM contained therein; and runs it off as alcohol, at the bottom thereof into

U. A SPIRIT RECEIVER. (For the plan of the coppers containing the domes P, and double tubes Q, above described, as well as the reversed double tubes V, and the safety pipes W, both hereafter described, vide fig. 4, and the explanations of it given below).

V. FIVE REVERSED or DESCENDING DOUBLE TUBES or PIPES (constructed on the same principle as those already described, but of smaller diameter), which are suspended, reversed, from the roofs of the several coppers from No. 7, down to No. 3, both inclusive. Of these reversed tubes the four uppermost pass through the domes P, to which they are tightly fixed; and they serve to return to the lower domes in succession, the phlegms, or such results of the vapor, in a liquid form, as may have been condensed in its passage upwards through these several domes. These phlegms, or condensed liquids, are partially redistilled in their progress; and the remainder pass through the fifth, or lowest, of these reversed tubes, into the copper No. 3, where they become mixed with the wash contained therein, and are again distilled with it.

W. FOUR SAFETY PIPES, fixed in the roofs of the several coppers, Nos. 4, 5, 6, and 7, which are intended to carry off such vapor as may rise from the wash in those coppers, and terminate in

X. A PIPE, which passes on to the worm-tub or refrigerator S, and by a separate worm

Y. of two or three coils only, runs off the small portion of spirit it produces into the spirit-receiver U.

Z. A PIPE communicating between coppers No. 1 and 2, having its upper end carried about four inches above the level of the liquor in copper No. 2, in order to admit of the increase of its volume by the condensation of the vapor which passes into it from the copper No. 1 by the tubes O. It also serves to return from copper No. 2 to the lower part of No. 1 whatever liquor may pass up the tubes O, by any sudden or excessive action of the fire

FIGURE II.

a. A PIPE AND COCK for the supply of cold water into the copper No. 8, for the purpose of additional condensation when the spirit is required of high proof.

b. A WASTE PIPE, fixed near the top of the uppermost copper No. 8, to carry off the heated water from the surface, in proportion as the pipe *a* furnishes cold water.

c. A PIPE AND COCK placed in the bottom of the copper No. 8, for the purpose of entirely drawing off, at pleasure, the water which may have been employed for additional condensation.

d. A PIPE AND COCK by which a stream of water may be thrown into the vessel D, and thence conveyed, by the valve or plug F, and pipes I or H, into the lowest vessels, either to be used as an occasional condensing power, or for the purpose of washing the still.

e. A PIPE AND COCK, by which a stream of clear water may be thrown into the uppermost of the domes P, and thence descend through the other domes below, in order to cleanse them from impurities.

B. 8, Plan of the copper B. 8, as shown in section in fig. 1.

D. Plan of the exterior vessel D, fig. 1.

E. Plan of the charging pipe E, fig. 1.

F. Plan of the valve or plug F, fig. 1.

G. Plan of the lever or fulcrum G, fig. 1.

P. Plan of the dome P, fig. 1.

R. Plan of the pipe R, fig. 1.

X. Plan of the pipe X, fig. 1.

FIGURE III.

(Referred to above, after the explanation of the spirit pipe T, fig. 1.)

B. PLAN OF THE COPPERS OR BOILERS from B, No. 4 to 7, as shown in section in fig. 1.

H. PLAN OF THE PIPES H, fig. 1, through which the liquor flows from copper to copper from No. 7 to No. 2, as it is displaced by the discharge from vessel D.

P. PLAN OF THE DOMES or semispherical vessels P, fig. 1, fixed in the centre of each copper

Q. PLAN OF THE DOUBLE ASCENDING TUBES OR PIPES Q, fig. 1, fixed upon the centre of the domes P.

V. PLAN OF THE DOUBLE REVERSED, OR DESCENDING TUBES OR PIPES V, fig. 1, through which the liquor produced by condensation of the vapor in its passage through the domes, falls back into copper No. 3.

W. PLAN OF THE SAFETY PIPES W, fig. 1, fixed upon the roofs of the coppers from No. 4 upwards, for the purpose of carrying off the little vapor generated in those coppers.

FIGURE IV.

(Referred to above, after the explanation of the double tubes or pipes O, fig. 1.)

B. PLAN OF THE TWO COPPERS OR BOILERS B, Nos. 2 and 3, as shown in section in fig. 1.

O. PLAN OF THE FIVE DOUBLE TUBES OR PIPES O, fig. 1, standing within the coppers Nos. 2 and 3 respectively, but fixed tightly upon the roofs of the coppers Nos. 1 and 2; through which the vapor passes from copper No. 1 to No. 2, and from No. 2 to No. 3.

H and Z. PLAN OF THE PIPES H and Z, fig. 1, passing through the roofs of the coppers Nos. 1 and 2. The pipe H extends from the liquor level in copper No. 3 to nearly the bottom of No. 2, and the pipe Z extends from about four inches above the liquor level in No. 2 to nearly the bot

tom of the lowest copper; as shown in section in fig. 1.

FIGURE V.

Presents in perspective, on an increased scale, one of the tubes O or Q, fig. 1.

FIGURE VI.

Presents a front elevation of the still, as fixed, exhibiting the mode of putting together the different compartments, constituting the several coppers B, No. 1 to 8, in fig. 1, which are secured by flanches and bolts.

A. THE FIRE-PLACE OR FURNACE as shown in section in fig. 1.

D. THE EXTERIOR OF THE VESSEL D, fig. 1.

F. THE PLUG OR VALVE F, fig. 1, with its pipe conveying the wash from the vessel D to the copper No. 7.

G. THE LEVER AND FULCRUM G, fig. 1, by which the valve or plug F is raised, to discharge the contents of the vessel D into the copper No. 7.

C. MANHOLE OR OPENING C, fig. 1, for the purposes there described. This figure only represents that in the copper No. 7; the remainder are shown in fig. 7.

I. EXTERIOR PIPE I, fig. 1, for the purpose of drawing off the wash from one copper to another. This figure only represents that communicating from copper No. 2 to No. 1; the remainder are shown in fig. 7.

K. SMALL TRIAL OR GAUGE COCK, K, fig. 1, to show when the wash is charged to the proper height, and to admit air when the liquor is drawn off. This figure only exhibits that in copper 1; those in Nos. 2, and 3, are shown in fig. 7.

L. SMALL PROOF COCK, L, fig. 1, to determine, by the application of a light, when all the spirit has distilled from the wash in copper No. 1.

M. A DISCHARGE PIPE AND COCK, M, fig. 1. for the purpose of discharging the wash above the crown or highest part of the copper.

N. A SECOND DISCHARGE PIPE AND COCK, N, fig. 1, for the purpose of discharging the wash entirely.

FIGURE VII.

Presents a back elevation of the still, as fixed, exhibiting the manner in which the several remaining pipes I, manholes C, and cocks K, referred to, but not shown in fig. No. 6, are arranged; the repetition of the description being considered unnecessary. The lowest manhole in this drawing is of a form different from the others; being on a scale to admit a person inside the vessel for the purpose of cleaning the bottom, the only part exposed to the action of the fire. The upper ones are of sufficient dimension to admit a person's arm to clean the coppers. But when the diameter exceeds materially that of the present view (which is in the original four feet two inches) it is necessary to have large manholes, the same as that in the lowest copper, to admit a person into them all. The command of all the pipes, cocks, and manholes is arrived at by means of a spiral staircase, which makes a half revolution of the still, and is generally made of cast iron.

In this figure the various water pipes, described in fig. No. 2, are not shown; as they could only be represented in a very indistinct way. For the same reason the discharge pipes M and N are not repeated; and the chimney is omitted, which would have given the figure an additional appearance of confusion; and is not necessary to make it intelligible. The foregoing explanations have the advantage of being perfectly clear and intelligible, a quality not common to descriptions of a mechanical nature; which are usually more adapted to the comprehension of scientific, than to the understanding of ordinary readers. Although in the description of the different parts of the apparatus, the separate uses of each are well defined, the general effect of the whole combination is left unexplained. It may therefore be necessary to give an idea of the principles on which the advantages to be derived from it are founded.

The eight coppers, placed one upon the other, of which the seven lowest are intended to hold the wash, and the upper one to receive water,—distil in the following manner:—

The first three, of which the second and third alone are intersected by the double pipes, distil almost at the same time. The lowest, only, being submitted to the immediate action of the fire, is, consequently, the first whose wash enters into a boiling state. The vapor penetrates into the second, passing through the wash which is contained in it, by means of the above mentioned pipes, and is there condensed, yielding up its caloric to that liquid, which is thereby quickly brought into a boiling state; the vapor which proceeds from the wash in the second boiler passes into the third, producing the same effects as in the preceding. The new vapor, necessarily stronger than the first, rises and passes into the fourth, where it is received under a semi-spherical dome (or calotte), which prevents it from communicating directly with the cold wash contained in that copper.

On arriving in this dome it is easily conceived that the most watery portion of the vapor is there condensed, giving up its caloric, which contributes to heat the wash that surrounds the dome. The most spirituous part, which passes into the dome of the fifth copper, experiences the same effect on coming in contact with a cold body. The same operation takes place from one dome to another up to the last. As the vapor which rises is exposed to a cold temperature it is condensed, ceding its caloric; and it is after a succession of sufficient condensations, that the spirit is divested of all weak and watery particles, which, thus liquefied, return from one dome to another, being partially re-distilled in their progress, according to their degree of gravity, until the least spirituous reaches the third copper, there to undergo a new distillation. It has been observed that the upper copper is reserved to contain cold water; it is by this means, and by renewing this water, keeping it in a higher or lower temperature, according to circumstances, that the distiller can obtain the spirit at the strength he desires.

To explain by what physical law the watery vapor is forced to return from dome to dome to the third copper, and is there found totally separated from the alcohol, which arrives at the worm pure and free from any empyreuma, we shall call to mind what all chemists and distillers are, doubtless, aware of. It is known that water cannot boil under a heat of 212° of Fahrenheit; while alcohol boils at about 173°. It is evident, therefore, that whenever the watery and alcoholic vapors rise, and are successively received in one or more atmospheres of from 174° to 190° or 200°, the watery vapor becomes separated from the alcoholic, and is condensed; and the last, only, passes out, and is received at the desired strength; care being taken to regulate properly the temperature of the water contained in the uppermost copper, which is traversed by the strongest and most alcoholic vapor before it passes into the worm.

It may be affirmed that the advantages of this apparatus are the greatest that have, as yet, been obtained. There is a great economy in fuel, as well from the small surface exposed to the action of the fire, and productive employment of every portion of the caloric, as by the simplicity and rapidity of the operation. To the saving of fuel we shall shortly advert more particularly. It will be perceived that a large portion of the spirit is distilled by vapor; and it is, consequently, much purer than that obtained by the ordinary apparatus. It is to the immediate contact with the fire of the material to be distilled, that distillers owe the greater portion of those injurious flavors and qualities with which spirits are frequently impregnated. Those bad flavors are acquired chiefly by the length of time that the wash remains exposed on the bottom of the still; for during the period requisite to bring it up from the cold state to that of ebullition, at which distillation commences, deposits of the heavier particles contained in the wash are made on the bottom, which, being rather absorbents than conductors, prevent that constant and uniform transmission of caloric which is essential to good and pure distillation. It is in the earlier stages of the application of fire that this effect is mainly produced; for, as the wash approaches a state of ebullition, the struggles, to reach the surface, of those parts of the wash which are impregnated with caloric, and consequently decreased in gravity, and which, in the first instance, are sluggish in their motion, gradually bring the mass into a state of ebullition, which counteracts the tendency to burn, or otherwise acquire injurious flavor. Once arrrived at the boiling point, the risk of this evil is almost entirely removed. But as, on the common principle of distillation, the still is every time charged with cold wash, so every distillation is equally exposed to the recurrence of the evil.

It is one of the peculiar merits of M. Saintmarc's still to have effectually provided against this disadvantage. In his apparatus, only the first charge of the lowest copper is entirely distilled by the direct action of the fire. The aqueous and alcoholic vapors, which rise together, on arriving in the second copper, become mixed with the wash contained in it and are re-distilled before they pass into the third copper. A third distillation takes place in that copper before it passes under the correcting influence of the succeeding vessels. Thus he effects one distillation by fire, which is immediately succeeded by two vapor distillations; and, subsequently, by five purifying processes, which divest the spirit of all its impurities; and it comes over, at one operation, of the strength of thirty-five per cent. over proof, according to Sikes's hydrometer, used by the Excise and English distillers; which is equivalent to bubble seventeen or eighteen in the commerce of the West India Planter, and about ·870 of the specific gravity of chemists. The strength at which M. Saintmarc brings over his spirit by a still of eight compartments, is limited to thirty-five or forty per cent. over proof; that being the highest degree generally required for purposes of commerce. But, by the addition of two or three more coppers or compartments to his still, he would succeed in obtaining, by one operation, the pure alcohol of the chemist, of the gravity of ·820 or ·825.

It has been observed, that only the first charge of the lowest copper is entirely distilled by the direct action of the fire; and that is the only portion of a distillation, however prolonged, which is exposed to the injury of burning. By making the first charge of the lowest copper water, instead of wash, even this small risk will be totally avoided; since the wash, when once heated, comes down invariably into the lowest copper in a boiling state; and during the short time that it remains there, being kept in a constant state of ebullition, it is not subject to the disadvantage of burning.

We speak of the shortness of the time during which the wash remains in the lowest copper. As soon as the whole of the spirit has distilled from the lowest copper, which is proved by the application of a light to the small proof cock L, fig. 6, already described, the wash is discharged from that copper and the cock I, communicating from copper No. 2 to No. 1, is immediately opened, which discharges the whole contents of No. 2 into No. 1, without at all suspending the distillation. In order to replace the wash drawn from copper No. 2, that contained in the vessel D is discharged, by raising the valve or plug F by means of the lever and fulcrum G, which displaces the same quantity down the pipes H, until the copper No. 2 is replenished. A fresh charge of wash is then drawn by the pipe E into the vessel D, ready for the next supply.

It is easy to conceive, that, when the first copper has furnished all the alcohol it contains, the wash of the second is chiefly distilled; and, therefore, when brought down into the lowest copper, in a state of perfect ebullition, and thus far advanced in the process, it remains for so short a time in contact with the fire, that it not only does not acquire any bad taste in consequence, but its perfect distillation is completed within fifteen or twenty minutes; the depth o the liquor being no more than ten or twelve inches. The process may thus be carried on ad infinitum, or so long as wash is furnished to feed the still. The supply displaced from the third

to the second copper has been already stated to be partly distilled; and the quantities contained in the copper with the domes have acquired a considerable degree of heat; graduated from a little below the boiling point in copper No. 4, down to 160° or 170° in copper No. 7. In imbibing the caloric brought by the vapor through the domes, which is continually renewed, the wash in the fourth and succeeding coppers becomes the first agent which contributes to divest the alcohol of the watery parts that rise with it.

It is among the advantages of this apparatus, that the continual and regular supply of wash, and the gradually advancing heat which it acquires in the manner just described, are calculated to prevent the occurrence of those accidents which arise in distilleries, chiefly from the mismanagement of the workmen employed: we mean by explosion or collapsion. When a large quantity of liquid, of a turbid and heavy nature, is collected in a body, and subjected to the action of a powerful fire, it happens, not unfrequently, that, before it arrives at the boiling point, it forms a strong head, which fills the space in the upper part of the still, and passes even down the worm; and, on some occasions, has caused an explosion of the still. The same result would follow the want of a proper outlet for the vapor. But the accident which more frequently occurs is collapsion. When a charge is worked off in the common still, it has frequently happened, that whilst it remains filled with vapor, a new charge of cold wash is thrown in for distillation, or of water for cleansing, without the precaution of opening the man-hole, or other aperture in the breast of the still, to admit air. A sudden condensation follows the admission of the cold liquor; and, a vacuum being formed, the still immediately collapses.

Against both these accidents, M. Saintmarc's still affords complete protection. If the wash acquire a head, which is only likely to happen with the first charge of the lowest copper, (and that may be prevented by using water for the first charge, as before stated), it can never penetrate further than the second copper; and is immediately returned by the pipe Z into the lower copper again. The pipes O and Q are ample security for the free passage of vapor which has to pass up them; and the safety-pipes W equally secure the coppers on which they stand, against all possibility of injury from the generation of vapor upon the surface of the wash in those coppers.

Against the risk of collapsion the same security seems to exist. The liquor brought down into the lowest copper being always at the boiling point, and that in the vessels above graduated below that point, the descent from vessel to vessel is accomplished without any material change in the temperature, which is acting upon the vapor within the domes; and, consequently, without, in any important degree, changing the course of condensation which is going forward. From this observation, in its strict sense, must be excepted the copper, No. 7; where a supply of wash being introduced from the vessel D, of a temperature considerably lower than that already existing in the copper, an additional condensing power is acting in that copper for a few minutes; and the product in spirit, during that period, will be somewhat diminished in quantity, but of higher strength. One of the effects of discharging the wash from the vessel D into the bottom of the copper No. 7 is that, to a certain extent, an equalisation of temperature takes place, by the admixture of the two bodies, in the act of displacing, by the pipe H, a quantity equal to that admitted from above. The more immediate object of fixing the vessel D round the uppermost compartment of the still, rather than as a detached vessel, is also to encrease the temperature of its contents, by contact, during the period occupied in working off a charge below, with a body at a much higher degree than the wash which it contains. By the union of these two advantages, the diminution of temperature in copper No. 7, only produces a slight effect, as already observed; and nothing like a vacuum is, or can be, formed in consequence; which is further provided against by the connexion of the dome in copper No. 7, with those both below and above: and, through the latter, with the large pipe leading to the worm-tub. We have been thus particular in detailing these parts of the case, as it is of high importance in distilleries to be independent both of ignorance and carelessness on these points.

The first impression on our minds, on a view of the drawing of the still, was that it was complex in its nature and construction, and must be difficult to manage. It requires, however, but little attention to discover that such is not the case. On the contrary, it is entirely self-acting as to all its interior arrangements, and so simple and unerring in its principle and operation, that any person, whether previously conversant with distillation or not, will be quite competent to its management, with a few days' practice; a point of great importance, where the indifference or ignorance of the parties employed to work the stills (as is the case, particularly in the West Indies), renders all complexity unadvisable. The mere stirring of a fire, and the turning of two or three cocks, is the utmost extent of attention required to conduct its operations.

The construction of the still has been already spoken of, in the description of its various parts; and care seems to have been taken, in this respect, to meet all reasonable emergencies. The diameter of the still being small, in proportion to its powers, as compared with the common stills in use; and each compartment being separately manufactured, and finally put together by flanches and bolts, M. Saintmarc generally makes a spare lower compartment, precisely adapted to the higher part, which goes with the still; and especially to the West Indies. It does not appear that this still will be of less duration than any other in use, or require more repairs than the most simple ones. On the contrary, the lowest copper is the only one which is submitted to any severe action; and if, either by lapse of time or constant use, or by any accident, to which carelessness equally exposes stills of all sorts, the bottom should be injured, a period of two or three days would suffice for taking away the lower compartment,

fixing the spare new one, and replacing the still in its position ready for work, as sound and perfect as when quite new. This must be of great importance to a West India planter, who, if the same thing were to happen with a common still, at the beginning of a crop, would, in all probability, be deprived of the means of working during the whole season; as the consequence of such an accident to a common still is, generally, the necessity for a new one; so difficult and expensive is the repair. In like manner the principle of the construction of this still affords easy access to any copper or compartment, in the event of a little repair being necessary. But it would appear to be little liable to derangement in its upper compartments; the only action there being an equable and quiet transmission of vapor upwards, and of wash downwards; neither of them calculated to injure the interior works.

A question suggested itself to us, as to the power of introducing into the lower compartment of M. Saintmarc's still, the machinery employed in most malt distilleries, for disturbing the heavier ingredients in the wash, which may settle on the bottom. We have already shown that such a case may be prevented here; but, supposing our view of the non-liability of the wash to be burnt should be erroneous, there does not appear any difficulty in introducing the chains, or other proper machinery, for that purpose. In the common still it is fixed vertically, through the upper part of the still, and worked through a stuffing box. In this it would also be required to be worked through a stuffing box, but horizontally, through the side of the lowest copper, by the aid of a pair of bevil wheels in the interior.

A series of experiments and calculations have been made for the purpose of demonstrating the powers of M. Saintmarc's still, and proving the allegations with regard to its saving of fuel, water, and many other points of economy, advanced in its favor. These experiments and statements are of a sufficiently interesting character to induce us to add them to the preceding observations, as they are calculated to carry conviction to the mind, from the plain and simple manner in which they are advanced. They are made in a way likely to attract notice; the powers of the patent still being placed in juxtaposition or contrast, with those of the common still. As far as our means extend of judging of the correctness of the statement with regard to the powers of the old still, we should be inclined to think them not unfairly put. The data on which some of them rest are admitted by chemists, having been proved by the experiments of some of the ablest men in that branch of science, both in this country and in France. The deductions, therefore, are easy on those parts of the case. With regard to many points, such as cost and number of apparatus and vessels, space required, savings, and other considerations of a commercial nature, and some other points, they are not susceptible of check by any but practical persons.

It is of course, well known, that the ordinary process of distillation consists of three operations, and is usually performed in two stills of different dimensions; the larger one called a wash still, being that in which the first operation takes place, of distilling the wash, the vapor proceeding from which, being of a weak nature, the product is an imperfect body, of about half the strength of proof spirit, and technically called low wine. This product is then conveyed to the smaller still called the low wine still, where it is subjected to a second distillation, from which results a spirit. A portion, however, of this latter product is separated from the remainder, it being of a weak and impure character; it is denominated feints by the excise laws and by the distillers, and is either submitted to a third distillation per se, or is mixed with the wash of the next distillation; being, however, generally separately distilled. These constitute three distinct operations. By M. Saintmarc's still, all this is effected at one operation; the weaker vapor, which constitutes the low wine of the first, and the feints of the second, distillation, on the old plan, being strengthened and purified by the subsequent processes to which it is subjected in the higher parts of his still; and all the weak part of the vapor, which, if passed into the worm, and there condensed, would be in the state of low wines or feints, being condensed within the still, long before it reaches the summit, and returned into the lowest coppers. This is the basis of one of the important savings of the still. On the old plan, the vapor generated by the first distillation is passed off immediately to the refrigerator or worm-tub, and there condensed; the vapor of the second distillation, the result of a new application of fuel, is again sent to the worm-tub and there condensed; and the third distillation, by the aid of a third fire, is again treated in the same way. M. Saintmarc makes the first application of fuel to his still effect all these objects. The vapor of the first copper heats the second; that of the second heats the third; that, again, passes through the several upper compartments, disttributing a portion of its caloric to the wash in each of them, thus preparing them for distillation, in which process the vapor has the benefit of those condensing powers which each body of wash contains, for the separation, by liquefaction, of its aqueous or weaker, from its alcoholic or stronger, portions.

The advantages here described are demonstrated by experiments, showing the actual powers of a still on this principle, as compared with those of the two stills in use on the old plan, of equal powers of production; in which are shown the relative areas or superficies of each exposed to the action of the fire; the generation of vapor on both plans; and the quantity of water employed in condensing that vapor.

A still on M. Saintmarc's principle, containing 560 imperial gallons of wash, in seven coppers of eighty gallons each, estimated to work off thirty charges of one copper, amounting to 2400 gallons, will produce (supposing the wash to be attenuated sixty degrees, and, consequently, capable of yielding twelve per cent. of proof spirit on the wash), 213 gallons of spirit at thirty-five per cent. over proof, equal to 288 gallons at proof in a day of twelve hours. A common still of the total contents of about 1700 imperial gallons (to contain a charge of 1200 gallons of wash), will

work off twice in twelve hours; distilling 2400 gallons of the same gravity as above, into 960 gallons of low wine; and a low wine still containing a charge of 480 gallons, will produce, at twelve per cent. on the wash, the same quantity, or 288 gallons of proof spirit.

The cost of these two stills is described as double that of the new still.

Taking, next, the diameters and superficies of the stills on both systems, it will be found that, on the old plan, a wash still to contain a charge of 1200 gallons, will have

A diameter of seven feet, and an area of about . . . . . 38½ feet
And a low wine still of 480 gallons, will have a diameter of five feet, and an area of 19½

Making a total superficial area in the two stills of . . . . . 58 feet

The diameter of a still to contain a charge of 560 gallons on the patent principle will be about fifty inches, and its area . . . . . 13½ fee

Being less than one fourth of the superficial area, exposed to the action of the fire, as compared with the two stills on the old plan.

The consequences of these diminished proportions, are —

First.—That the construction of the furnace for the patent still, does not cost above one-third, or one-fourth, that of the two furnaces on the old plan.

Secondly.—That the consumption of fuel is proportioned to the areas of the respective stills, combined with the quantities of liquid raised into vapor, and the economy of caloric, or heat, in that operation, resulting from their different principles of construction.

It may be shown that, from the union of these considerations, results the fact (proved in practice), that the patent still does not consume, in any case, more than one-third, and, probably, less than one-fourth, of the fuel that is employed by the others. To present this more intelligibly (always bearing in mind the respective superficies of 13½ and 58 feet), the different quantities of vapor passed through the worms, and there condensed on the two plans, may be stated. For this purpose, taking the average volumes of vapor generated by the various liquids distilled, when entirely evaporated, to be in the proportion of 1500 to 1, it will be seen that, by the old plan, there is produced :—

Of low wines . . .	960 gallons
Of spirit, (at proof) . .	288
Of feints, (one fourth) . .	72
Making	1320 gallons × 1500 = 1,980,000

being the gallons of vapor passed through the refrigerator on the old plan.—On the patent principle there is produced :—

Of spirit, (35 over proof) . . . 213 gallons × 1500 = 319,500

being the gallons of vapor passed through the refrigerator on that principle; or less than one-sixth of that produced by the principle now in practice.

In pursuing this enquiry to the consumption of water, which is necessarily proportioned to the quantity of vapor condensed, it is assumed, that the vapor necessary to produce one gallon of liquid will raise to the boiling point, in its condensation, five gallons of water—and taking 50° of Fahrenheit as the mean temperature of water, it will be found that 1500 gallons of vapor, equivalent to one gallon of liquid, will communicate to five gallons of water, caloric to the extent of 162°; but as the temperature of water, for the purpose of condensation, will be in a great measure ineffectual, when raised above 104°, it follows, that the absorption of caloric, by the water, to bring it to that point, is only 54°, or one-third of 162°—and, therefore, three times five gallons, or fifteen gallons of water, will be necessary to condense the vapor, which will produce one gallon of liquid.

Thus, on the old plan, (as shown before) . . .	1320 × 15 = 19,800
And on the patent plan, (as shown before) . . .	213 × 15 = 3195
To which must be added, for the water consumed in the uppermost copper of the still	600
Making a total quantity of	3795

Which two sums of 19,800 and 3,795 are the respective numbers of gallons of water employed to condense the vapor, on the two principles; or, in the same proportion for any increased or diminished consumption, arising either from employing the water at a lower or higher temperature, or from the repeated use of the standing contents of the worm-tub, in consequence of its becoming cool when not worked.

A variety of estimates are given, exhibiting the diminished size and cost of the necessary buildings, and the decrease, in number and expense, of the various descriptions of vessels, pumps, pipes, &c., employed in one, as compared with the other, system. These, though essential to the distiller, are not necessary parts of our view of the question.

Another statement is given of the powers of

a still on M. Saintmarc's principle, which, were it not, as is stated, demonstrable in practice, would exceed belief.

A still of eight feet six inches diameter, containing 350 gallons of wash in each of the seven lower compartments, or a total charge of 2450 gallons, will run off in the day of twenty-four hours, at least 30,000 imperial gallons of wash, and produce between 3000 and 4000 gallons of spirit; a quantity unprecedented in the annals of distillation.

The results of some experiments are given, which were made in the presence of the officers of the board of excise in May 1826, by which, at one operation, some spirit was produced as high as fifty-eight per cent. over proof, and the mean strength of the whole day's distillation was forty-three per cent. over proof. The produce in quantity exceeded by ten per cent. what was required by the excise, according to the attenuation of the wash. A surplus to this extent, however, cannot be calculated upon; but it is manifest, that the evaporation and loss consequent upon one single distillation, is small as compared with that which results from three distillations, and two pumpings, or other removals from vessel to vessel, as hitherto practised. By experiments on this head made with the same wash, on the two modes of distillation, the result has shown a surplus product, in favor of M. Saintmarc's plan, varying, according to the delicacy of management, from three to six per cent.

M. Saintmarc and M. Alégre, have also introduced into practise in distillation, some changes in the previous process of fermentation, which effect an improvement in the quality of the wash, and give an increase in the quantity of spirit. See article FERMENTATION.

They have likewise constructed an apparatus, secured by patent, for improving the rectification of raw or feint spirits, by which a greater degree of purity is attained than by the common rectifying still; and the fine flavors necessary for making compounds are employed more beneficially and delicately than by the existing process. For a description of this still, see article RECTIFICATION.

We have devoted a large space to the examination of this question. But the apparatus and process united, present too interesting a subject of enquiry and investigation, as compared with the existing systems, to admit of its being slightly passed over.

We shall conclude with a few observations of the proprietors of the patent, addressed alike to the interest of the British distiller and the West India planter. They say, when speaking of the advantages the still offers:—'These advantages consist, shortly, in the comparatively low price of the still—the trifling expense of erecting the furnace—the small consumption of fuel and water—the diminished number, dimensions, and cost of the necessary vats, pumps, pipes, &c., connected with the still—the limited space required for its erection—the saving of time in the process of distillation resulting from its use—its uniform applicability to every liquid that has undergone, or is susceptible of, vinous fermentation (as well as to numerous other branches of chemical science), and, especially, in the production, by one operation from the wash, of a spirit, exceeding in strength and purity all those which have hitherto been obtained in this country, by any single process. To these important considerations, which are alike applicable to the united kingdom and the colonies, may be added, as especially so to the latter, the no less important points of the production of rum one-third higher proof than the average of what is now obtained in many of them; and the extensive saving in puncheons, freight, and charges, when shipped in that concentrated state.'

'It is unnecessary to go into details of the saving in puncheons, freight and charges, when rum is shipped at a high proof. It is a matter of too much importance, and too easily estimated by a planter, to require figures in confirmation of the statement. But the actual saving to him in these items, however considerable, is only a part of the advantage. The spirit thus obtained, from its greater purity, bears a value in the market much above that determined by the relative degree of strength, as compared with rum of a lower standard. And as this improvement in strength and quality is effected, not at an augmentation, but at a considerable diminution of expense, it is unquestionable, that, when employed for purposes of barter, according to the practice of the colonies, at a reduced strength, that reduction from the high strength at which it is brought over by this apparatus, may be made consistently with a preservation of its purity; and its value, as an article of barter, thus enhanced in a considerable degree.'

They conclude—

'It must be recollected that this is not an apparatus the principle of which is untried. For some years a still of the same kind—less perfect, it is true, but still embodying the main principle of this, has been used in France, by the inventor there (who is also one of the proprietors of the present patent), with the most entire success. This has, therefore, the great advantage of having corrected, in its construction, whatever defects were found in the original invention, from which no new invention is entirely exempt; such corrections being founded on eighteen months' experience in France. And the opinion is warranted, that the apparatus constituting the subject of this patent, and of the present remarks, is, in its principle, the most sound and scientific, and the most sure and perfect in its operations, of any that has been adapted to the art of distillation in this country.'

The practical uses of distillation in chemistry are too numerous to be mentioned. By it the volatile part of any substance is separated from that which is fixed, as in the distillation of turpentine, in which the essential oil rises and the rosin is left behind; the more evaporable is separated from the less evaporable, as in the preparation or rectification of ardent spirit; liquids are freed from foreign or accidental impurities, as in the distillation of common water: volatile substances are united in an easy and commodious manner, as in preparing the odorous distilled waters of aromatic vegetables: bodies are decomposed and analysed, new compounds are formed, and a

knowledge is gained of the native and chemical properties of natural substances.

Common distillation of aromatic vegetables is a simple process, but gives room for some nicety of management, particularly in the regulation of the heat and the quantity of water, which can only be learned by experience. As an example, common peppermint water may be given, and is thus made: put a pound and a half of dry peppermint in a still, cover it with water, put on the capital, luting the joints with wet bladder or pasted paper; bring the liquor to boil quickly, and keep it just boiling till about a gallon of water has run over. The residue in the still is then thrown away as useless. The water that comes over first is somewhat turbid, owing to the excess of essential oil that it contains, and in consequence is by much the strongest. By rest it becomes clear, and a fine pellicle of oil rises to the top.

The following circumstances are chiefly observable in common distillation:—The substance from which the distillation is made in some cases requires previous treatment, in others none. The petals of flowers, such as roses and jasmine, may be used immediately, or only after the gentlest drying. The aromatic herbaceous vegetables, such as peppermint, may be used indiscriminately fresh or dry, observing, that as the plant is much more watery when fresh than when dry, more water may be added in the distillation of the latter than of the former. Hard woods should be rasped or bruised, and, as they are less easily penetrated by the water, they should be macerated in it without heat for from one or two days to as many weeks, before distillation.

The quantity of water to be used varies much according to circumstances. It should be always so much as during the whole process to cover all that part of the still which is immediately over the fire, otherwise the vegetable matter will scorch, and give a very disagreeable burnt taste and smell, or empyreuma, to the distilled liquor. On the other hand, too much water makes the distilled liquor unnecessarily dilute. In general, fresh vegetables require about thrice their weight of water; and when dry, five or six times. The still should never be more than about three-fourths full, or even less when succulent vegetables are used, to prevent boiling over. The management of the fire is of some consequence, to prevent boiling over and empyreuma on the one hand, and on the other to give heat enough for extraction of the aromatic principle. Where a water bath is used (which, however, is tedious, and seldom if ever necessary), all danger of excess of heat is avoided, but it is often requisite to increase the heat of the bath by adding salt to the water. When, in distilling without a bath, too much heat is used, there is danger either of blowing off the capital, not without risk to the bye-stander, when the liquor boils with extreme vehemence (which is particularly likely to occur when the still is too full of bulky herbaceous vegetables, that rise in the capital and partly choke up the opening into the worm-pipe), or else the liquor boils over into the worm-pipe, and mixes a decoction of the vegetable with the distilled water. This is soon perceived by the condensed liquor coming out at the bottom of the worm, not in a clear uniform streamlet, but by gushes and starts, with a gurgling noise, and fouled or colored. When this accident happens, the fire should be entirely slacked, the capital taken off, the liquor already come over returned into the still, and the distillation begun again with more care. When the stream of distilled water flows evenly, and the boiling liquor is heard to simmer moderately in the boiler, the operator will know that the process is going on properly.

The quantity of aromatic water to be obtained from a given weight of any vegetable cannot be laid down with accuracy, so as to obtain a liquor of uniform strength, as (independently of any difference in conducting the operation) the season of the year, the length of drying, and other causes, will materially affect the intensity of aroma in the vegetable. The taste, therefore, is a better criterion to judge when to stop the process, as the liquor will run nearly tasteless long before the water has all boiled away. Some advantage is gained by mixing all the distilled liquor together, as the first portion has generally rather more essential oil than it can retain, and the last portion has less.

The *laws* which relate to the management of a distillery are numerous and important; we subjoin a brief abstract. By 43 Geo. III. c. 69, every distiller or maker of low wines or spirits for sale, or exportation, within England, shall take out a licence, which shall be charged with the yearly sum of £10; and every rectifier of spirits within England, shall pay for such licence a duty of £5; and such licence shall be renewed annually before the end of the year, on pain of forfeiting, if a common distiller, £200; if a molass distiller or rectifier, £30. (24 Geo. III. c. 41.) No person shall be deemed a rectifier or compounder who shall not have an entered still capable of containing, exclusive of the head, 120 gallons, which shall have suitable tubs and worms, and be used for rectifying British spirits for sale, (26 Geo. III. c. 73. By 19 Geo. III. c. 50,) every such distiller shall cause to be put up in large characters, over the outward door of every place used for making or keeping of British-made spirits, the words *Distiller*, *Rectifier*, or *Compounder* of *Spirituous Liquors*, on pain of £100; and if any person shall buy any such spirits of any person not having such words over his door, he shall forfeit £50 By 21 Geo. III. c. 55, if any distiller or dealer shall buy any British-made spirits (except, as in the former case, at the public sales of condemned spirits by the commissioners of excise) he shall forfeit £500. By 19 Geo. III. c. 50, no person shall be permitted to make entry of any work-house or place, or of any still or utensil for making, distilling, or of keeping low wines or spirits, unless he shall occupy a tenement of £10 a year, assessed in his own name, and paying the parish-rates; and by 21 Geo. III. c. 55, in order to prevent private distillations, every person who shall make or distill any low wines or spirits, whether for sale or not for sale, shall be deemed a common distiller for sale, and shall enter his still and vessels at the next office of excise; and every person making or keeping any wash fit for dis-

tillation, and having in his custody any still, shall be deemed a common distiller for sale, and be liable to the several duties, and subject to the survey of the officers. No common distiller or maker of low wines, spirits, or strong waters, for sale, shall set up any tun, cask, wash-back, copper, still, or other vessel, for making or keeping any worts, wash, low wines, spirits, or strong waters; nor alter, nor enlarge the same, nor have any of them private or concealed, or any private warehouse, cellar, &c., for making or keeping any of the said liquors, without first giving notice at the next office of excise, on pain of £20; and he in whose occupation any of the same shall be, shall forfeit £50; 8 and 9 Wil. c. 19. And by 24 Geo. II. c. 40, every distiller shall, ten days before he distils or makes any spirituous liquors, enter every vessel, &c., at the next office of excise, on pain of £50 for every still or vessel used and not entered. And every distiller shall, four days before he begins to brew any grain, &c., make entry at the next excise office, of all coppers, vessels, &c., inserting in such entry the day on which he intends to begin, and the use to which such vessel is to be applied, which shall not be altered on pain of forfeiting £100, with the liquor, which may be seized by any officer of excise, 26 Geo. III. c. 73. And by 21 Geo. III. c. 55, no person shall make use of any vessel, room, &c., for making wash for the distillation of low wines and spirits, without giving a notice at the next office of excise, on pain of £50 for every vessel, room, &c., used without notice. Nor shall any person withdraw his entry whilst any duty is depending, or any vessels are standing, except by changing it on the day of its being withdrawn, (23 Geo. III. c. 70.; 26 Geo. III. c. 73.) No person is allowed to have any still or number of stills, which singly or together contain less than 100 gallons, under the penalty of £100 for every still; and the wash-still shall contain at least 400 gallons, exclusive of the head, under the same penalty. 2 Geo. III. c. 5; and 14 Geo. III. c. 73.

Distillers are to show to the officer every still or other vessel entered; and the vessels are to be marked by the gauger; and defacing the mark, or rubbing out, incurs a penalty of £20. 26 Geo. II. c. 40.

Distillers who use private pipes, &c., for conveyance of distilled liquors, forfeit £100. (10 and 11 Wil. c. 4.) They shall also make holes in the breast of the still for taking gauges and samples, and provide locks on the still-heads, the holes, discharge-cocks, and furnace-door, under a penalty of £50, and of £200 for breaking or wilfully damaging such lock or fastening, after it has been secured by the officer. 12 Geo. III. c. 46; 14 Geo. III. c. 73.

The distiller shall provide proper ladders for the officer to examine each still, and assist in setting them up, on pain of £200. 23 Geo. III. c. 70.

Distillers are required to give notice to the officer of excise before they receive any wine, cyder, &c., or any kind of fermented wash, on pain of £50, and also before they charge or open the still, expressing and describing the number and marks of the wash-batches used: and they are prohibited from charging the still with any other, under a penalty of £100. 24 Geo. II. c. 40; 12 Geo III. c. 46; 14 Geo. III. c. 73.

Distillers, in preparing grist for wash, that use more in the proportion of one quarter of wheat to two quarters of any other grain, forfeit £50. 33 Geo. II. c. 9.

If any corn distiller, or maker of low wines or spirits from corn or grain, shall make use of any molasses, coarse sugar, honey, or any composition or extract of sugar, in brewing or preparing his wash for distillation, or receive such materials into his custody, exceeding 10 lbs. in weight, he shall forfeit £100; and officers may take samples of the wash in any vessel, paying for the same at the rate of 1*s.* 6*d.* a gallon; and if the distiller shall obstruct him, he shall forfeit £100. 23 Geo. III. c. 70.

Officers are to attend at the still-houses, after due notice, to see that the wash-stills are properly filled, and when they are fully charged to lock and secure them. And if any person shall open any still-head, &c., after they have been so locked and before they are opened by the officer of excise, or shall wilfully damage any lock or fastening, he shall forfeit £200. 12. Geo. III. c. 46.

Removing or concealing wash, &c., in the possession of any distiller, incurs a forfeiture of the same; and such distiller, and the person employed to remove, or who shall receive the same, shall severally forfeit 10*s.* for every gallon of it; and no wort, wash, &c., shall be put into the still or removed from the back or vessel in which it was fermented, till the same has been gauged, in the penalty of £200 and double duty.

The officer shall every three months, if required, take an account of the stock of all distillers and rectifiers, and, if any unfair increase shall be found, the same shall be forfeited and may be seized; and the person in whose stock such excess shall be found shall forfeit £50. Rectifiers are to mark the strength and quality of mixed spirits on the outside of the cask, and in default thereof, or if untruly marked, the same shall be forfeited, and also the casks, and may be seized; and the rectifier shall forfeit £50. 26 Geo. III. c. 73.

By 27 Geo. III. c. 31, made perpetual by 41 Geo. III. c. 97, it was enacted, that all spirits should be deemed and taken to be of the strength indicated by Clarke's hydrometer; but, by 43 Geo. III. c. 97, the lords of the treasury may discontinue the use of this hydrometer, and direct any other to be used in lieu of it. All British spirits of the third extraction, or which have been twice distilled from low wines, and had flavor communicated to them, shall be deemed 'British brandy;' if no flavor has been communicated to them, the same shall be deemed 'rectified British spirits.' If of the second extraction, or once distilled from low wines, the same shall be deemed 'raw British spirits.' And all British spirits distilled with juniper berries, caraway seeds, anise seeds, or other seeds, or ingredients used in the compounding of spirits, shall be deemed 'British compounds.' And all British spirits of a greater strength than one to two over hydrometer proof shall be deemed 'spirits of wine.' Officers shall take an account of the

stock of rectifiers and compounders every three months at least, and if any increase of quantity, under certain limitations, be found, the quantity in excess shall be forfeited, and may be seized; and such person shall forfeit £50.

And if any British spirits or compounds are sent out of a greater strength than one in five under hydrometer proof, the same shall be forfeited, and treble value, or £50 in the whole; and the same may be seized, with the casks and vessels containing it. 30 Geo. III. c 37. The distiller shall weekly make entry of all wash by him used for the making of low wines and spirits within each week, on pain of £10; and within a week after shall pay off the duties, on pain of double duty. 19 Geo. III. c. 50. All permits for removing British spirits shall correspond with the request notes, and be delivered with such spirits to the buyer, on the forfeiture of the same to such buyer and double the price, including the duties: and such buyer may be admitted to prove that such spirits were delivered without a lawful permit; but no buyer shall be allowed to avail himself of such forfeiture unless complaint is made within fourteen days after the delivery of the spirits. 26 Geo. III. c. 73.

Retailers of distilled liquors, or such as sell the same in less quantity than two gallons, must take out a licence, for which they are to pay annually a sum corresponding to the rent of the premises which they occupy; if the rent of such retailer be £15, or upwards, £5. 2*s*.; at £20, and upwards, £5. 10*s*.; at £25, and upwards, £5. 18*s*. at £30, or upwards, £6. 6*s*.; at £40, or upwards, £6. 14*s*.; and at £50, or upwards, £7. 2*s*. This licence, which is to be renewed annually, on the penalty of £50, is to be granted only to those who keep taverns, victualling-houses, inns, coffee-houses, or ale-houses; who, within the limits of the office of excise in London, pay £10 a year rent, and parish rates, and in places where the occupiers are not rated £12 a year; and who, in other parts of the kingdom, pay to church and poor. They must first be licensed to sell ale in the places where they dwell.

By 16 Geo. II. c. 8, retailers of spirituous liquors, without licence, were subject to a penalty of £10; and by 24 Geo. II. c. 40, all liquors found in the custody of such persons, or within six calendar months after conviction, were to be seized. And by 13 Geo. III. c. 56; and 30 Geo. III. c. 38, such retailers are to forfeit £50, subject to mitigation so as not to be reduced below £5. Every person who shall retail less than two gallons shall enter his warehouses, shops, &c., and his spirituous liquors, on pain of £20 for every place, and 40*s*. for every gallon not entered; and also the liquors and casks. 9 Geo. II. c. 23; 30 Geo. III. c. 38. By 19 Geo. III. c. 69, every importer or dealer in spirituous liquors, shall cause to be painted on a conspicuous part of the house, shop, or cellar, &c., used by him, the words *Importer of*, or *Dealer in, Spirituous Liquors*, on pain of £50. Any importer or dealer buying of a person who has not these words over the door of his shop, &c., shall forfeit £100. Any person who hath not made entry of his liquors, and who hath these words over his door, shall forfeit £50. No spirituous liquors shall be brought into a place of sale without previous notice to the officer of excise, and leaving with him a certificate, expressing that all the duties are paid, the quantity and quality, the name of the seller, &c., on pain of forfeiting £20, and also the liquor and casks. 9 Geo. II. c. 23. Retailers shall not increase the quantity of their liquors, on pain of 40*s*. a gallon; and the liquors so mixed with water, or any other liquors, shall be seized and forfeited. 9 Geo. II. c. 23. By 21 Geo. III. c. 55, the stock increased shall be forfeited, a quantity equal to the increased quantity shall be seized by the officer, and the person offending shall forfeit £20. The officer may at all times, by day or night, enter into warehouses, shops, or other places, to take an account of the quantity and quality; and if any retailer hinder the officer he shall forfeit £50. 9 Geo. II. c. 23. No licensed retailer shall have any share in a distillery or rectifying house, or be concerned in such trade, on pain of £200. 26 Geo. III. c. 73.

Hawkers of spirituous liquors in the streets, &c., are liable to a forfeiture of £10. 9 Geo. II. c. 23. 11 Geo. II. c. 26. Persons giving away spirituous liquors, or paying wages in them, shall be deemed retailers. 9 Geo. II. c. 23. Keepers of gaols, workhouses, &c., selling spirituous liquors, or knowingly suffering them to be sold, except such as are prescribed by a physician, surgeon, or apothecary, forfeit for the first offence £100, and for the second their office. Persons bringing any such liquors into any place of that kind may be apprehended, and on conviction committed to the house of correction, or prison, for any time not exceeding three months, unless they immediately pay a fine, not exceeding £20, nor less than £10. Debts for spirituous liquors cannot be recovered, unless they have been contracted, or the liquors delivered at one time to the value of 20*s*. or upwards: and distillers knowingly selling or delivering distilled liquors to unlicensed retailers, forfeit £10, and treble their value; and the retailer, convicting the distiller, is entitled to a share of the penalty, and is himself indemnified. Persons riotously rescuing offenders, or assaulting informers, and their aiders or abettors, are guilty of felony, and liable to seven years' transportation. 24 Geo. II. c. 40. If any person shall obstruct any officer in the execution of his duty, in relation to this act, he shall forfeit £200. 23 Geo. III. c. 81. No liquor exceeding one gallon shall be removed without a permit. 6 Geo. I. c. 21. British spirits made from corn are allowed on exportation as merchandise, a bounty or drawback of £3. 12*s*. per ton. 5 Geo. III. c. 5; 27 Geo. III. c. 13. And by 6 Geo. II. c. 17. for spirits drawn from British corn, a drawback was to be allowed at the port of shipping, of £4. 18*s*. per ton, in full of all drawbacks: and by 23 Geo. II. c. 9, there was to be an additional drawback of £24. 10*s*. a ton, on all British-made spirits exported; provided that they are not exported in casks containing less than 100 gallons, and in vessels of less burden than 100 tons, except to Africa and Newfoundland, whither they may be exported in any vessels not less than seventy tons. 6 Geo. III. c. 46. The 43 Geo. III. c. 69, which con-

solidates the duties, &c., of excise, continues all advances, bounties, and drawbacks, which are particularly directed to be made by any act or acts of parliament in force, on or immediately before the 5th of July, 1803, except so far as such allowances may be varied or repealed by the same act. By 39 and 40 Geo. III. c. 73, spirits distilled in England for exportation to Scotland, are exempted from the excise duties in England. And by 43 Geo. III. c. 69, for every gallon, English wine measure, of spirits, not exceeding in strength that of one to ten over hydrometer proof, and so in proportion for any higher degree of strength, made in England and thence imported into Scotland, payment is to be made by the importer before landing, of 4*s.*; and by c. 81, an additional duty of 2*s.*: for every such gallon manufactured in Scotland and brought from thence into England, 5*s.* 0½*d.*; and by c. 81, an additional duty of 2*s.* 5*d.* For every gallon of such spirits of greater strength than one to ten over hydrometer proof, and not exceeding £3 per cent. over and above one to ten over hydrometer proof, 7*s.* 5½*d.* and a surcharge. And all duties and drawbacks under these acts shall be proportionate to the actual quantity. No spirits shall be sent from Scotland to England, or from England to Scotland, by land, or in vessels of less than seventy tons burden, or in casks containing less than 100 gallons, on forfeiture of the same, together with casks or package. And if any distiller, rectifier, compounder, or dealer in spirits, or servant belonging to any such person, shall obstruct an officer in the execution of this act, he shall forfeit £200. Vide laws relating to distillation under GENEVA, WHISKEY, BRANDY, and RUM. See also HYDROMETER.

DISTINCT', *adj.* DISTINC'TION, *n. s.* DISTINC'TIVE, *adj.* DISTINC'TIVELY, *adv.* DISTINCT'LY, *adv.* DISTINCT'NESS, *n. s.* Fr. *distinct*; Italian, Portug. and Span. *distinto*; Lat. *distinctus*, from *distinguo*, *dis*, and Gr. στίζω, to mark or prick for distinction: marked out in any way; different in kind, degree, or number; separate: distinction is the act or art of discerning a difference, as well as the thing that notes it; and the honor or difference of state resulting. Distinctive is that which marks a difference, or having power to do so: distinctively and distinctly, clearly without confusion of differences. Distinctness, more intense or accurate distinction.

For tho thingis that ben withouten the soule ghyieth voicis, eithir pipe, eithir harpe, but tho ghyuen *distinccioun* of sownyngis hou schal it be knowun that is sungun eithir that that is trumpid?

Wiclif. 1 *Cor.* 13.

The mixture of those things by speech, which by nature are divided, is the mother of all error: to take away therefore that error, which confusion breedeth, *distinction* is requisite. *Hooker.*

I did all my prilgrimage dilate,
Whereof by parcels she had something heard,
But not *distinctively*. *Shakspeare. Othello.*

This fierce abridgment
Hath to it circumstantial branches, which
Distinction should be rich in. *Id. Cymbeline.*

Lawfulness cannot be handled without limitations and *distinctions*. *Bacon's Holy War.*

Credulous and vulgar auditors readily believe it, and the more judicious and *distinctive* heads do not reject it. *Browne.*

Heaven is high,
High and remote, to see from thence *distinct*
Each thing on earth. *Milton.*

Tempestuous fell
His arrows from the fourfold-visaged four,
Distinct with eyes; and from the living wheels
Distinct alike with multitude of eyes. *Id.*

If by the church they mean the communion of saints only; though the persons of men be visible, yet because their *distinctive* cognizance is invisible, they can never see their guide; and therefore they can never know whether they go right or wrong. *Bp. Taylor.*

The intention was, that the two armies, which marched out together, should afterwards be *distinct*. *Clarendon.*

Maids, women, wives, without *distinction* fall;
The sweeping deluge, love, comes on, and covers all. *Dryden.*

The object I could first *distinctly* view,
Was tall straight trees, which on the waters flew. *Id.*

The membranes and humours of the eye are perfectly pellucid, and void of colour, for the clearness, and the *distinctness*, of vision. *Ray on Creation.*

Fatherhood and property are *distinct* titles, and began presently, upon Adam's death, to be in *distinct* persons. *Locke.*

This will puzzle all your logick and *distinctions* to answer it. *Denham's Sophy.*

On its sides it was bounded pretty *distinctly*, but on its ends very confusedly and indistinctly. *Newton's Opticks.*

In story-telling, besides the marking *distinct* characters, and selecting pertinent circumstances, it is likewise necessary to leave off in time and end smartly. *Steele.*

For from the natal hour, *distinctive* names,
One common right the great and lowly claims. *Pope's Odyssey.*

Some young men of *distinction* are found to travel through Europe, with no other intent, than that of understanding, and collecting pictures, &c. *Goldsmith.*

There is too much reason to apprehend, that the custom of pleading for any client, without discrimination of right or wrong, must lessen the regard due to those important *distinctions*, and deaden the moral sensibility of the heart. *Percival.*

The painter, on the other hand, can throw stronger illumination and *distinctness* on the principal moment or catastrophe of the action; besides the advantage he has in using a universal language which can be read in an instant of time. *Darwin.*

I used then to say, and I say so still, render the office of a bishop respectable by giving some civil *distinction* to its possessor, in order that his example may have more weight with both the laity and clergy. *Bp. Watson.*

DISTIN'GUISH, *v. a.* & *v. n.* DISTIN'GUISHABLE, *adj.* DISTIN'GUISHED, *part. adj.* DISTIN'GUISHER, *n. s.* DISTIN'GUISHINGLY, *adv.* DISTIN'GUISHMENT, *n. s.* Fr. *distinguer*; Span. and Port. *distinguer*; It. and Lat. *distinguere*. See DISTINCT. To mark diversity; to specify; to know by some mark or

token; to judge; and hence to honor: as a neuter verb, to make distinction. Distinguishable is capable of being distinguished; honorable. Distinguishingly, accurately; or with some mark of honor. Distinguishment seems synonymous with distinction.

Rightly to *distinguish*, is, by conceit of the mind, to sever things different in nature, and to discern wherein they differ. *Hooker.*

We have not yet been seen in any house,
Nor can we be *distinguished*, by our faces,
For man or master.
Shakspeare. Taming of the Shrew.

Let us admire the wisdom of God in this *distinguisher* of times, and visible deity, the sun.
Browne's Vulgar Errours.

Impenitent, they left a race behind
Like to themselves, *distinguishable* scarce
From Gentiles, but by circumcision vain.
Milton.

The acting of the soul, as it relates to perception and decision, to choice and pursuit, or aversion, is *distinguishable* to us. *Hale's Origin of Mankind.*

Being dissolved in aqueous juices, it is by the eye *distinguishable* from the solvent body. *Boyle.*

The not *distinguishing* where things should be *distinguished*, and the not confounding where things should be confounded, is the cause of all the mistakes in the world. *Selden.*

If writers be just to the memory of Charles II., they cannot deny him to have been an exact knower of mankind, and a perfect *distinguisher* of their talents.
Dryden.

We are able, by our senses, to know and *distinguish* things; and to examine them so far as to apply them to our uses, and several ways to accommodate the exigencies of this life. *Locke.*

St. Paul's Epistles contain nothing but points of Christian instruction, amongst which he seldom fails to enlarge on the great and *distinguishing* doctrines of our holy religion. *Id.*

Can I be sure that in leaving all established opinions I am following the truth; and by what criterion shall I *distinguish* her, even if fortune should at last guide me on her footsteps?
Hume on Human Understanding.

The *distinguishing* part of our constitution is its liberty. *Burke.*

Moses *distinguishes* the causes of the flood into those that belong to the heavens, and those that belong to the earth, the rains, and the abyss.
Burnet's Theory.

I would endeavour that my betters should seek me by the merit of something *distinguishable*, instead of my seeking them. *Swift.*

Wit, I consider as a singular and unavoidable manner of doing or saying any thing peculiar and natural to one man only, by which his speech and actions are *distinguished* from those of other men. *Congreve.*

Let us revolve that roll with strictest eye,
Where, safe from time, *distinguished* actions lie.
Prior.

To make corrections upon the searchers' reports, I considered whether any credit at all were to be given to their *distinguishments*.
Graunt's Bills of Mortality.

For sins committed, with many aggravations of guilt, the furnace of wrath will be seven times hotter, and burn with a *distinguished* fury. *Rogers.*

Some call me a Tory, because the heads of that party have been *distinguishingly* favourable to me.
Pope.

Never on man did heavenly favour shine
With rays so strong, *distinguished*, and divine.
Id. Odyssey.

The question is, whether you *distinguish* me, because you have better sense than other people, or whether you seem to have better sense than other people, because you *distinguish* me. *Shenstone.*

DISTORT', *v. a.* } Lat. *distortus*, from *dis* and *torqueo*, *tortus*, to turn. To make crooked; twist; writhe; deform: often used figuratively.
DISTOR'TION, *n. s.* }

Something must be *distorted* beside the intent of the divine inditer. *Peacham on Poetry.*

With fear and pain
Distorted, all my nether shape thus grew
Transformed. *Milton.*

Wrath and malice, envy and revenge, do darken and *distort* the understandings of men. *Tillotson.*

By his *distortions* he reveals his pains;
He by his tears and by his sighs complains.
Prior.

In England we see people lulled asleep with solid and elaborate discourses of piety, who would be warmed and transported out of themselves by the bellowings and *distortions* of enthusiasm.
Addison's Spectator.

Now mortal pangs *distort* his lovely form. *Smith.*

Here cross-legged nobles in rich state shall dine,
There, in bright mail, *distorted* heroes shine. *Gay.*

For gold, his sword the hireling ruffian draws;
For gold, the hireling judge *distorts* the laws.
Johnson. Vanity of Human Wishes.

We prove its use
Sovereign and most effectual to secure
A form, not now gymnastic as of yore,
From rickets and *distortion*, else our lot.
Cowper.

DISTRACT', *v. a.* & *adj.* }
DISTRACT'EDLY, *adv.* }
DISTRACT'EDNESS, *n. s.* } Fr. *distraire*; Ital. *distrare*; Span. *distrahar*, from Lat. *dis*, diversely, and *traho*; Gr. δρασσω, to draw.
DISTRAC'TION, }
DISTRAC'TIVE, *adj.* }
DISTRAUGHT', *part. adj.* }

To draw several ways at once: to perplex the mind; to harass: vex; make mad. Distraction and distractedness are synonymous. Distractive is causing perplexity. Distraught is distracted.

While I suffer thy terrors I am *distracted*. *Psalm.*

By sea, by sea.
—Most worthy Sir, you therein throw away
The absolute soldiership you have by land;
Distract your army, which doth most consist
Of war-marked footmen.
Shakspeare. Antony and Cleopatra.

Better I were *distract*,
So should my thoughts be severed from my griefs;
And woes, by wrong imagination, lose
The knowledge of themselves. *Id. King Lear.*

Come, cousin, canst thou quake, and change thy colour,
Murder thy breath in middle of a word
And then again begin, and stop again,
As if thou wert *distraught* and mad with terror?
Id. Richard III.

Methought her eyes had crossed her tongue,
For she did speak in starts *distractedly*.
Id. Twelfth Night.

She was unable in strength of mind to bear the grief of his disease, and fell *distracted* of her wits. *Bacon.*

The needle endeavours to conform unto the meridian; but being *distracted*, driveth that way where the greater and powerfuller part of the earth is placed. *Browne's Vulgar Errours.*

He had been a good military man in his days, but was then *distraught* of his wits. *Camd. Rem.*

It would burst forth; but I recover breath;
And sense *distract* to know well what I utter.
Milton's Agonistes.

The two armies lay quiet near each other without improving the confusion and *distraction* which the king's forces were too much inclined to. *Clarendon.*

Idleness is but the devil's home for temptation, and for unprofitable *distracting* musings. *Baxter.*

Never was known a night of such *distraction*,
Noise so confused and dreadful! jostling crowds,
That run and knew not whither. *Dryd. Span. Fr.*

Oft grown unmindful through *distractive* cares,
I've stretched my arms, and touched him unawares.
Dryden.

If he cannot wholly avoid the eye of the observer, he hopes to *distract* it by a multiplicity of the object. *South.*

You shall find a *distracted* man fancy himself a king, and with a right inference require suitable attendance, respect, and obedience. *Locke.*

So to mad Pentheus double Thebes appears,
And furies howl in his distempered ears;
Orestes so, with like *distraction* tost,
Is made to fly his mother's angry ghost. *Waller.*

What may we not hope from him in a time of quiet and tranquillity, since, during the late *distractions*, he has done so much for the advantage of our trade? *Addison's Freeholder.*

Commiserate all those who labour under a settled *distraction*, and who are shut out from all the pleasures and advantages of human commerce. *Atterbury.*

This quiet sail is as a noiseless wing
To waft me from *distraction*; once I loved
Torn ocean's roar, but thy soft murmuring
Sounds sweet as if a sister's voice reproved,
That I with stern delights should e'er have been so moved. *Byron's Childe Harold.*

DISTRAIN' *v. a.* & *n.* } Fr. *destraindre*;
DISTRAIN'ER, *n. s.* } Ital. and Lat. *distringere*; *dis*, expletive, and *stringo*, to gripe. To lay hold of by law. See the article.

Here's Beauford, that regards not God nor king,
Hath here *distrained* the Tower to his use.
Shakspeare.

The earl answered, I will not lend money to my superior, upon whom I cannot *distrain* for the debt. *Camden's Remains.*

Blood, his rent to have regained
Upon the British diadem *distrained*. *Marvel.*

DISTRAIN, or DISTREIN, in law, is to attach, or seize on one's goods, for the satisfaction of a debt. It is the mode of levying a distress. See the following article.

DISTRESS', *v. a.* & *n. s.* } Fr. *détresse*; It.
DISTRESS'FUL, *adj.* } *distrezza*; from Lat. *districtio*, *distringo*; to press hard; hence, distress, because a person in distress is pressed by his affairs. To seize by law; to harass; crush by affliction; make unhappy.

We are troubled on every side, yet not *distressed*. *Bible. 2 Cor.* iv. 8.

O flesh they ben, and o flesh, as I gesse,
Hath but on herte in wele and in *distress*.
Chaucer. Cant. Tales.

He would first demand his debt; and, if he were not paid, he would straight go and take a *distress* of goods and cattle, where he could find them, to the value. *Spenser.*

There can I sit alone, unseen of any,
And to the nightingale's complaining notes
Tune my *distresses*, and record my woes.
Shakspeare.

I often did beguile her of her tears,
When I did speak of some *distressful* stroke
That my youth suffered. *Id. Othello.*

They were not ashamed—to come to me for assessments and monthly payments for that estate which they had taken; and took *distresses* from me upon my most just denial. *Bp. Hall's Hard Measure.*

Quoth she, some say the soul's secure
Against *distress* and forfeiture. *Hudibras.*

People in affliction or *distress* cannot be hated by generous minds. *Clarissa.*

The ewes still folded, with distended thighs,
Unmilked, lay bleating in *distressful* cries.
Pope's Odyssey.

And such is the fate of hapless lexicography, that not only darkness, but light, impedes and *distresses* it; things may be not only too little, but too much known, to be happily illustrated.
Johnson. Preface to Dictionary.

Ah! then and there was hurrying to and fro,
And gathering tears, and tremblings of *distress*,
And cheeks all pale, which but an hour ago
Blushed at the praise of their own loveliness.
Byron.

DISTRESS, DISTRICTIO, is the taking of a personal chattel out of the possession of the wrongdoer, into the custody of the party injured, to procure a satisfaction for the wrong committed. The term distress is also, in our law books, applied to the thing taken by this process, as well as to the process itself. The most usual injury for which a distress may be taken is that of non-payment of rents. See RENT.

It is held as a universal principle, that a distress may be taken for any kind of rent in arrear; the detaining of which beyond the day of payment is an injury to him that is entitled to receive it. Likewise, for neglecting to do suit to the lord's court, or other certain personal service, (Co. Litt. 46,) the lord may distrain, of common right. Also, for amercements in a court-leet a distress may be had of common right; but not for amercements in a court-baron, without a special prescription to warrant it, (Brownl. 36.) Another injury for which distresses may be taken, is where a man finds beasts of a stranger wandering in his grounds, damage-feasant; that is, doing him hurt or damage, by treading down his grass, or the like; in which case the owner of the soil may distrain them till satisfaction be made him for the injury sustained. Lastly, for several duties and penalties inflicted by special acts of parliament, as for assessments made by commissioners of sewers, stat. 7 Ann. c. 10, or for the relief of the poor, stat. 43 Eliz. c. 2, remedy by distress and sale is given: with regard to which

it may be observed, that such distresses are partly analogous to the ancient distress at common law, as being repleviable and the like (4 Burr. 589); but more resembling the common law process of execution, by seizing and selling the goods of the debtor under a writ of FIERI FACIAS, which see.

By stat. 56 Geo. 3, c. 88, § 16, 17, tenants in Ireland having paid rent to their immediate landlord, if distrained by the superior landlord, may recover damages against their immediate landlord, and retain them out of the future accruing rent. By this act, as amended by 58 Geo. 3, c. 39, the powers of distress on corn, &c., growing (given in England by stat. 11 Geo. II., c. 19) are extended to Ireland; and other provisions are made for the recovery of tenements from absconding, overholding, and defaulting tenants.

With respect to the things which may be distrained, or taken in distress, it may be laid down as a general rule, that all chattels personal are liable to be distrained, unless particularly protected or exempted. Instead, therefore, of mentioning the things that are distrainable, it will be more easy to recount the things which are not so, with the reason of their particular exemptions. (Co. Litt. 47). Every thing which is distrained is presumed to be the property of the wrong-doer: it will follow, therefore, that such things, in which no man can have an absolute and valuable property, as dogs, cats, rabbits, and all animals feræ naturæ, cannot be distrained. But if deer, which are feræ naturæ, are kept in a private enclosure for the purpose of sale or profit, this circumstance reduces them to a kind of stock or merchandise, that they may be distrained for rent. Moreover, whatever is in the personal use or occupation of any man is, for the time, privileged and protected from any distress; as an axe with which a man is cutting wood, or a horse while a man is riding him. But horses drawing a cart, and also the cart, may be distrained for rent-arrere, if a man be not upon the cart (1 Vent. 36): and it hath been said, that if a horse, though a man be riding him, be taken damage-feasant, or trespassing in another's ground, the horse may be distrained and led away to the pound. (1 Sid. 440.) However, the authorities on this point being collected together in Hargr. Co. Litt. 47, the clear result of them is, that such a distress is illegal. Again, valuable things in the way of trade shall not be liable to distress; as a horse standing in a smith's shop to be shod, or in a common inn; or cloth at a tailor's house; or corn sent to a mill or market. All these are protected or privileged for the benefit of trade; and are supposed in common presumption not to belong to the owner of the house, but to his customers. But, generally speaking, whatever goods and chattels the landlord finds upon the premises, whither they, in fact, belong to the tenant or a stranger, are distrainable by him for rent; for otherwise a door would be open to infinite frauds upon the landlord; and the stranger has his remedy by action on the case against the tenant, if by the tenant's default the chattels are distrained, so that he cannot render them when called upon. With regard to a stranger's beasts which are found on the tenant's land, the following distinctions are taken. If they are put in by consent of the owner of the beasts, they are distrainable immediately afterwards for rent-arrere by the landlord. (Cro. Eliz. 549.) So also if the stranger's cattle break the fences, and commit a trespass by coming on the land, they are distrainable immediately by the lessor for his tenant's rent, as a punishment to the owner of the beasts for the wrong committed through his negligence. (Co. Litt. 47.) But if the lands were not sufficiently fenced so as to keep out cattle, the landlord cannot, generally, distrain them, till they have been levant and couchant on the land; that is, have been long enough there to have lain down and rose up to feed; which, in general, is held to be one night at least; and then the law presumes, that the owner may have notice whither his cattle have strayed, and it is his own neglect not to have taken them away. There are also other things privileged by the ancient common law; as a man's tools and utensils of his trade, the axe of a carpenter, the books of a scholar, and the like; which are said to be privileged for the sake of the public, because the taking of them away would disable the owner from serving the commonwealth in his station. So, beasts of the plough, averia carucæ, and sheep, are privileged from distresses at common law (stat. 51 Hen. III. c. 4.): while dead goods, or other sort of beasts, which Bracton calls catalla otiosa, may be distrained. But, as beasts of the plough may be taken in execution for debt, so they may be for distresses by statute, which partake of the nature of executions. 4 Burr 589). And, perhaps, the true reason, why these and the tools of a man's trade were privileged at the common law, was, because the distress was then merely intended to compel the payment of the rent, and not as a satisfaction for the non-payment; and, therefore, to deprive the party of the instruments and means of paying it, would counteract the very end of the distress (4 Burr. 588). Moreover, nothing shall be distrained for rent, which may not be rendered again in as good a plight as when it was distrained; for which reason milk, fruit, and the like, cannot be distrained; a distress at common law being only in the nature of a pledge or security, to be restored in the same plight when the debt is paid. So, anciently, sheaves or stacks of corn could not be distrained; because some damage must needs accrue in their removal; but a cart loaded with corn might; as that could be safely restored. But now by statute 2 W. & M. c. 5, corn in sheaves or cocks, or loose in the straw, or hay in barns or ricks, or otherwise, may be distrained, as well as other chattels. Lastly, things fixed to the freehold may not be distrained, as caldrons, windows, doors, and chimney pieces; for they savour of the realty. For this reason also corn growing could not be distrained; till the statute of 11 Geo. II. c. 19, empowered landlords to distrain corn, hops, grass, or other products of the earth, and to cut and gather them when ripe. The goods of a carrier are privileged, and cannot be distrained for rent, though the waggon containing them is put into the barn of a house, or on the road. (1 Salk. 249). But the goods of

a third person, found on the premises, may be distrained by the collector of the house and window tax, for arrears under 43 Geo. III. c. 161, though the goods are only borrowed and the person in arrear has other goods of his own on the premises sufficient to satisfy the arrears. 1 Maid. and Sel. Rep. 601.

ii. We enquire next *how* distresses may be taken, disposed of, or avoided. The law of distresses, says Blackstone, is greatly altered in late years. Formerly they were regarded as a mere pledge or security for payment of rent or other duties, or satisfaction for damage done. And so the law continues with regard to distresses of beasts taken damage-feasant, and for other causes, not altered by act of parliament; over which the distrainer has no other power than to retain them till satisfaction is made. But distresses for rent-arrere being found by the legislature to be the shortest and most effectual method of compelling the payment of such rent, many beneficial laws for this purpose have been made in the last century; which have much altered the common law, as laid down by our ancient writers. In discussing this part of the subject, it will be supposed that the distress is made for rent; and the differences between such distress, and that taken for other causes, will be specified. All distresses must be made by day, unless in the case of damage-feasant; an exception being made in this case, lest the beasts should escape before they are taken. (Co. Litt. 142). When a person intends to make a distress, he must, by himself or his bailiff, enter on the demised premises; formerly during the continuance of the lease, but now (stat. 8 Ann. c. 14), if the tenant holds over, the landlord may distrain within six months after the determination of the lease; provided his own title or interest, as well as the tenant's possession, continue at the time of the distress. If the lessor does not find sufficient distress on the premies, formerly he could not resort any where else; and therefore, knavish tenants made a practice to convey away their goods and stock, fraudulently, from the house or lands demised, in order to cheat their landlords. But now (stat. 8 Ann. c. 14. 11 Geo. II. c. 19), the landlord may distrain any goods of his tenant, carried clandestinely off the premises, wherever he finds them within thirty days after, unless they have been bonâ fide sold for a valuable consideration: and all persons privy to, or assisting in such fraudulent conveyance, forfeit double the value to the landlord. The landlord may also distrain the beasts of his tenant, feeding upon any commons or wastes, appendant or appurtenant to the demised premises. The landlord might not formerly break open a house, to make a distress, for that is a breach of the peace. But when he was in the house, it was held, that he might break open an inner door (Co. Litt. 16. Comberb. 17); and now (stat. 11 Geo. II. c. 19) he may, by the assistance of the peace officers of the parish, break open, in the day-time, any place whither the goods have been fraudulently removed, and locked up to prevent a distress; oath being first made, in case it be a dwelling-house, of a reasonable ground to suspect that such goods are concealed in it. Where a man is entitled to distrain for an entire duty, he ought to distrain for the whole at once; and not for part at one time, and part at another. (2 Lutw. 1532). But if he distrains for the whole, and there is not sufficient on the premises, or he happens to mistake in the value of the thing distrained, and so takes an insufficient distress, he may take a second distress to complete his remedy. (Cro. Eliz. 13. stat. 17; Car. II. c. 7: 4 Burr 590). Distresses must be proportioned to the thing distrained for. By the statute of Marlbridge, 52 Hen. III. c. 4, if any man takes a great or unreasonable distress, for rent-arrere, he shall be heavily amerced for the same. Or if (2 Inst. 107.) the landlord distrains two oxen for twelve-pence rent; the taking of both is an unreasonable distress; but if there were no other distress near the value to be found, he might reasonably have distrained one of them; but for homage, fealty, or suit and service, as also for parliamentary wages, it is said that no distress can be excessive. (Bro. Abr. tit. Assise. 291; Prerogative 98.) For as these distresses cannot be sold, the owner, upon making satisfaction, may have his chattels again. The remedy for excessive distresses is by a special action on the statute of Marlbridge; for an action of trespass is not maintainable upon this account, it being no injury at the common law.

iii. When the distress is taken, the next object of consideration is the *disposal* of it. For which purpose the things distrained must in the first place be carried to some pound, and there impounded by the taker. But in their way thither, they may be rescued by the owner, in case the distress was taken without cause, or contrary to law: as if no rent be due; if they were taken upon the highway, or the like; in these cases the tenant may lawfully make rescue. (Co. Litt. 160, 161). But if they be once impounded, even though taken without any cause, the owner may not break the pound and take them out; for they are then in custody of the law. (Co. Litt. 47). When impounded, the goods were formerly only in the nature of a pledge or security to compel the performance of satisfaction: and upon this account, it has been held (Cro. Jac. 148) that the distrainor is not at liberty to work or use a distrained beast. And thus the law still continues with regard to beasts taken damage-feasant, and distresses for suit or services; which must remain impounded, till the owner makes satisfaction; or contests the right of distraining by replevying the chattels. This kind of distress, though it puts the owner to inconvenience, and is therefore a punishment to him, yet, if he continues obstinate and will make no satisfaction or payment, it is no remedy at all to the distrainor. But for a debt due to the crown, unless paid within forty days, the distress was always saleable at common law. (Bro. Abr. tit. Distress. 71). And for an amercement at a court-leet, the lord may also sell the distress (8 Rep. 41); partly because, being the king's court of record, its process partakes of the royal prerogative (Bro. ubi. supra. 12 Mod. 330): but principally, because it is in the nature of an execution to levy a legal debt. And so in the several statute-distresses already mentioned, which are also in the nature of executions; the power of sale is

likewise usually given, to effectuate and complete the remedy. And in like manner, by several acts of parliament (2 W. & M. c. 5., 8 Ann. c. 14., 4 Geo. II. c. 28, 11 Geo. II. c. 19), in all cases of distress for rent, if the tenant or owner do not, within five days after the distress is taken, and notice of the cause thereof given to him, replevy the same with sufficient security, the distrainor, with the sheriff or constable, shall cause the same to be appraised by two sworn appraisers, and sell the same towards satisfaction of the rent and charges; rendering the overplus, if any, to the owner himself. And, by these means, a full and entire satisfaction may now be had for rent in arrear, by the mere act of the party himself, viz. by distress, the remedy given at common law, and sale consequent thereon, which is added by act of parliament. If any distress and sale shall be made, for rent in arrear and due, when none is really due, the owner shall recover double value, with full costs. 2 W. Sess. 1 c. 5.

The taking of a distress was formerly reckoned a hazardous proceeding, on account of the many particulars that attended it: for if any irregularity was committed, it vitiated the whole, and made the distrainors trespassers ab initio (1 Ventr. 37). But now, by the statute 11 Geo. II. c. 19, it is provided, that for any unlawful act done, the whole shall not be unlawful, or the parties trespassers ab initio; but that the party grieved shall only have an action for the real damage sustained; and not even that, if tender of amends is made before any action is brought. *Blackst. Comm.* Book iii.

Distress, Personal, is made by distraining a man's moveable goods, and seizing the profits of his lands and tenements, from the teste, or date of the writ, for the defendant's contempt in not appearing to an action brought against him when he was summoned, or attached; and the issues so returned by the sheriffs, are forfeited to the king, and estreated into the exchequer.

Distress, Real, is made on immoveable goods. It differs from an attachment in this, that it cannot be taken by any common person, without the compass of his own fee; except it be presently after the cattle, or other things are driven, or borne off the ground, on purpose to avoid distress.

Distress has been termed either finite or infinite. *Distress finite*, is that which is limited by law, in regard to the number of times it shall be made, in order to bring the party to a trial of the action. *Distress infinite*, is that which is without any limitation being made till the person appears. It is farther applied to jurors that do not appear: as, upon a certificate of assise, the process is venire facias, habeas corpora, and distress infinite. It is also divided into grand distress and ordinary distress: of these the former extends to all the goods and chattels that the party has within the county. A person, of common right, may distrain for rents and all manner of services; and where a rent is reserved on a gift in tail, lease for life, or years, &c., though there be no clause of distress in the grant or lease, so as that he has the reversion: but on a feoffment made in fee, a distress may not be taken, unless it be expressly reserved in the deed.

DISTRIB'UTE, *v. a.* } Fr. *distribuer*; Ital. and Span. *distribuere*; Lat. *distribuere*; *dis*, diversely, and *tribuo*, to bestow. To divide among several; to deal forth; dispense. Distributer is, he who deals out; and distribution, the act of distributing; hence charity. Distributive, that which assigns the due portions of things Distributively, proportionally; singly; particularly.

Distrib'uter, *n. s.*
Distribu'tion, *adj.*
Distrib'utive, *adj.*
Distrib'utively, *adv.*

She did *distribute* her goods to all them that were nearest of kindred. *Judith* xvi. 24.

The king sent over a great store of gentlemen and warlike people, amongst whom he *distributed* the land. *Spenser.*

Although we cannot be free from all sin collectively, in such sort that no part thereof shall be found inherent in us; yet, *distributively* at the least, all great and grievous actual offences, as they offer themselves one by one, both may and ought to be by all means avoided. *Hooker.*

The spoil got on the Antiates
Was not *distributed*. *Shakspeare. Coriolanus.*

Of great riches there is no real use, except it be in the *distribution*. *Bacon's Essays.*

If Justice will take all, and nothing give,
Justice methinks is not *distributive*. *Dryden.*

Observe the *distributive* justice of the authors, which is constantly applied to the punishment of virtue, and the reward of vice, directly opposite to the rules of their best criticks. *Swift.*

There were judges and *distributers* of justice appointed for the several parts of his dominions. *Addison on Italy.*

Let us govern our charitable *distributions* by this pattern of nature, and maintain a mutual circulation of benefits and returns. *Atterbury.*

As an integral whole is distinguished into its several parts by division, so the word *distribution* is most properly used, when we distinguish a universal whole into its several kinds of species. *Watts.*

There remains yet to be considered the *distribution* of words into their proper classes, or that part of lexicography which is strictly critical. *Johnson.*

The Latin language, long the vehicle used in *distributing* knowledge among the different nations of Europe, is daily more and more neglected. *Franklin.*

Distribution, in printing, the taking a form asunder, separating the types, and disposing them in the cases again, each in its proper cell. See Printing.

DI'STRICT, *n. s.* Fr. *district*; Ital. *distretto*; Span. *districto*; Lat. *districtus*, from *distringo*, to bind, as with limits. The limit, or circuit, of a given authority: hence, a region, country, or portion of a country.

His governors, who formed themselves upon the example of their grand monarque, practised all the arts of despotick government in their respective *districts*. *Addison.*

With stern distate avowed,
To their own *districts* drive the suitor crowd. *Pope.*

Those *districts* which between the tropicks lie,
The scorching beams, directly darted, fry. *Blackmore.*

DISTRINGAS, in English law, a writ directed to the sheriff, or other officer, commanding him

to distrain for a debt to the king; or for his appearance at a certain day. There is a distringas against peers, and persons entitled to privilege of parliament, under statute 10 Geo. III., cap. 50; by which the effects, in law called issues, levied may be sold to pay the plaintiff's cost, and it has been held that this statute extends to all writs of distringas. In detinue, after judgment, the plaintiff may have a distringas to compel the defendant to deliver the goods by repeated distresses of his chattels. See DISTRESS, EXECUTION, and PARLIAMENT.

DISTRINGAS JURATORES, a writ directed to a sheriff, whereby he is commanded to distrain upon a jury to appear and to return issues on their lands, &c. for non-appearance. Where an issue in fact is joined to be tried by a jury, which is retained by the sheriff in a pannel upon a venire facias for that purpose; there goes forth a writ of distringas juratores, for the sheriff to have their bodies in court, &c. at the return of the writ. This writ ought to be delivered to the sheriff in such time, that he may warn the jury to appear four days before the writ is returnable, if the jurors live within forty miles of the place of trial; and eight days if they live farther off. There may be an alias, or pluries distringas jur', where the jury doth not appear. See JURY, and TRIAL.

DISTRU'ST, *v. a.* & *n. s.* } *Dis* and trust.
DISTRU'STFUL, *adj.* } To regard with
DISTRU'STFULLY, *adv.* } diffidence or suspicion; not to
DISTRU STFULNESS. } trust.

He sheweth himself unto such as do not *distrust* him. *Wisdom.*

To me reproach
Rather belongs, *distrust*, and all dispraise. *Milton.*

Common swearing, if it have any serious meaning at all, argues in man a perpetual *distrust* of his own reputation, and is an acknowledgment that he thinks his bare word not to be worthy of credit. *Tillotson.*

You doubt not me; nor have I spent my blood,
To have my faith no better understood:
Your soul's above the baseness of *distrust*;
Nothing but love could make you so unjust. *Dryden.*

Generals often harbour *distrustful* thoughts in their breasts. *Boyle.*

How frequently is the honesty and integrity of a man disposed of, by a smile or a shrug;—how many good and generous actions have been sunk into oblivion by a *distrustful* look, or stampt with the imputation of proceeding from bad motives, by a mysterious and seasonable whisper. *Sterne.*

DISTU'RB, *v. a.* & *n. s.* } Span. *disturbar*;
DISTU'RBANCE, *n. s.* } Ital. and Lat. *disturbare*, from *dis*
DISTU'RBER, } *turbare*, from *dis*
DISTU'RBED, *part. adj.* } expletive, and *turbo* to disorder, a *turba* a crowd. To perplex; disquiet; confound; interrupt; turn off attention, or aim. Milton uses disturb as a substantive for confusion or tumult, or synonymous with disturbance.

And thei seynge him walkinge on the see weren *disturblid* and seiden that it is a fantum. *Wiclif. Matt.* 14.

He stands in the sight both of God and men most justly blameable, as a needless *disturber* of the peace of God's church, and an author of dissensions. *Hooker.*

Where love reigns, *disturbing* jealousy
Doth call himself affliction's sentinel;
Gives false alarms, suggesteth mutiny,
And in a peaceful hour doth cry, kill! kill! *Shakspeare.*

Instant without *disturb* they took alarm,
And onward move embattled. *Milton.*

This mischief had not then befallen,
And more that shall befall: innumerable
Disturbances on earth through female snares. *Id.*

He that has his own troubles, and the happiness of his neighbours, to *disturb* him, has work enough. *Collier on Envy.*

His youth with wants and hardships must engage;
Plots and rebellions must *disturb* his age. *Prior.*

Ye great *disturbers*, who in endless noise,
In blood and horror, seek unnatural joys:
For what is all this bustle, but to shun
Those thoughts with which you dare not be alone? *Granville.*

They can survey a variety of complicated ideas without fatigue or *disturbance*. *Watts.*

Thrice round the grave Circæa prints her tread,
And chaunts the numbers which *disturb* the dead. *Darwin.*

DISTU'RN, *v. a.* *Dis* and turn. To turn off; turn aside. Not in use.

He glad was to *disturn* that furious stream
Of war on us, that else had swallowed them. *Daniel.*

DISVAL'UE, *v a.* } *Dis* and value. To
DISVALUA'TION, *n. s.* } estimate below worth; disgrace: diminution of reputation.

What can be more to the *disvaluation* of the power of the Spaniard, than that eleven thousand English should have marched into the heart of his countries? *Bacon.*

Her reputation was *disvalued*
In levity. *Shakspeare. Measure for Measure.*

The very same pride which prompts a man to vaunt and overvalue what he is, does as forcibly incline him to contemn and *disavow* what he has. *Government of the Tongue.*

DISVE'LOP, *v. a.* Fr. *developer*. To uncover.

DISUNITE', *v. a.* & *n. s.* } *Dis* and unite.
DISU'NITION, *n. s.* } To separate; divide; part union.
DISU'NITY. }

While every particular member of the publick provides solely for itself, the several joints of the body politick do separate and *disunite*, and so become unable to support the whole. *South.*

Disunity is the natural property of matter, which is nothing else but an infinite congeries of physical monads. *More.*

Rest is most opposite to motion, the immediate cause of *disunion*. *Glanville's Scepsis.*

Disunion of the corporeal principles, and the vital, causeth death. *Grew's Cosmologia Sacra.*

The strength of it will join itself to France, and grow the closer to it by its *disunion* from the rest. *Addison on the War.*

The beast they then divide, and *disunite*
The ribs and limbs. *Pope's Odyssey.*

DISU'SAGE, *n. s.* *Dis* and usage. The gradual cessation of use or custom.

They cut off presently such things as might be extinguished without danger, leaving the rest to be abolished by *disusage* through tract of time. *Hooker.*

DISUSE', *v. a* & *n. s.* *Dis* and use. To cease to make use of; to disaccustom: with *from* or *to*; more properly *from*.

Disuse me *from* the queasy pain
Of being beloved and loving. *Donne.*

'Tis law, though custom now diverts the course:
As nature's institute is yet in force,
Uncancelled though *disused*. *Dryden's Fables.*

The *disuse* of the tongue is the only effectual remedy against these. *Addison's Guardian.*

That obligation upon the lands did not prescribe, or come into *disuse*, but by fifty consecutive years. *Arbuthnot.*

DISVOUCH', *v. a.* *Dis* and vouch. To destroy the credit of; to contradict.

Every letter he hath writ hath *disvouched* another. *Shakspeare.*

DISWIT'TED, *adj.* *Dis* and wit. Deprived of the wits; mad; distracted. A word not in use.

She ran away alone,
Which when they heard, there was not one
But hasted after to be gone,
As she had been *diswitted*. *Drayton's Nymphid.*

DIT, *n. s.* Dutch *dicht*. A ditty; a poem; a tune. Obsolete.

No bird but did her shrill notes sweetly sing;
No song but did contain a lovely *dit*. *Faerie Queene.*

DITA'TION, *n. s.* Lat. *ditatus*. The act of enriching.

Those eastern worshippers intended rather homage than *ditation*; the blessed virgin comes in the form of poverty. *Hall's Contemplations.*

DITCH, *n s.* & *v. a.* } Gothic,
DITCH-DELIVERED, *part. adj.* } *digue*; Ice.
DITCH-DOG, *n. s.* } *diki*; Belg.
DITCH'ER. } *dijck*. See DIKE. The verb comes from the noun. Ditcher is one who makes ditches: the compounds of Shakspeare explain themselves.

In the great plagues there were seen, in divers *ditches* and low grounds about London, many toads that had tails three inches long. *Bacon.*

The *ditches*, such as they were, were altogether dry, and easy to be passed over. *Knolles.*

Poor Tom, when the foul fiend rages, eats cow-dung for sallets, swallows the old rat, and the *ditch-dog*. *Shakspeare.*

Finger of birth-strangled babe,
Ditch-delivered by a drab. *Id.*

To some men the wide seas are but narrow *ditches*, and the world itself too limited for their desires. *Burton.*

You merit new employments daily,
Our thatcher, *ditcher*, gardener, baily. *Swift.*

I have employed my time, besides *ditching*, in finishing my travels. *Id.*

Sudden the *ditches* swell, the meadows swim. *Thomson.*

I have no more pleasure in hearing a man attempting wit, and failing, than in seeing a man trying to leap over a *ditch*, and tumbling into it. *Johnson.*

Up again! for every warrior
Slain, another climbs the barrier.
Thicker grows the strife; thy *ditches*
Europe's mingling gore enriches. *Byron.*

DITCH, in fortification, called also the foss and moat, is a trench dug round the rampart, or wal of a fortified place, between the scarp and counterscarp. Ditches are either dry or wet, that is, having water in them; both of which have their particular advantages. The earth dug out of the ditch serves to raise the rampart. The ditch in front should be of such breadth as that tall trees may not reach over it, being from twelve to twenty-four fathoms wide, and seven or eight feet deep. But the most general rule is, perhaps, that the dimensions of the ditch be such as that the earth dug out may be sufficient to build the rampart of a proper magnitude.

DITCH is a common fence in marshes, or other wet land, where there are no hedges. They allow these ditches six feet wide against high ways that are broad; and against commons, five feet. But the common ditches about enclosures, dug at the bottom of the bank on which the quick is raised, are three feet wide at the top, one at the bottom, and two feet deep. By this means each side has a slope, which is of great advantage; for where this is neglected, and the ditches dug perpendicular, the sides are always washing down, besides, in a narrow-bottomed ditch, if cattle get down into it, they cannot stand to turn themselves to crop the quick: but where the ditch is four feet wide, it should be two feet and a half deep; and where it is five feet wide, it should be three feet deep; and so in proportion.

DITHYRAMBICK, *n. s.* & *adj.* Lat. *dithyrambus*. A song in honor of Bacchus; in which among the Italians, the distraction of ebriety is still imitated. Wild; distracted.

Pindar does new words and figures roll
Down his impetuous *dithyrambick* tide. *Cowley.*

DITHYRAMBICS were songs in honor of Bacchus, which first gave birth to dramatic representations, and are as ancient as the worship of Bacchus in Greece. Many of the most splendid exhibitions upon the stage, for the entertainment of the people of Athens and Rome, being performed upon the festivals of Bacchus, gave occasion to the calling all those that were employed in them, whether for singing, dancing, or reciting, servants of Bacchus. The dithyrambus owes its birth to Greece, and to the transports of wine. Horace and Aristotle tell us, that the ancients gave the name of dithyrambus to those verses wherein none of the common rules or measures were observed. As we have now no remains of the dithyrambus of the ancients, we cannot exactly tell what their measure was.

DITMARSEN, a district of Holstein, Denmark, separated from Sleswick on the north by the Eyder, and from Bremen on the south-west by the Elbe; and having Holstein Proper to the east, and the German Ocean to the west. It is marshy, and frequently inundated: yet by means of the internal navigation, a number of tracts have been drained, and are highly productive.

Its length is thirty-two miles, and its breadth twenty-seven. The chief towns are Meldorf and Lunden. It is fertile in corn and pasturage.

DITONE, in music, an interval comprehending two tones. The proportion of the sounds that form the ditone is 4 : 5, and that of the semiditone is 5 : 6.

DITRIHEDRIA, in mineralogy, a genus of spars with twice three sides, or six planes; being formed of two trigonal pyramids joined base to base, without any intermediate column. See SPAR. The species of ditrihedria are distinguished by the different figures of these pyramids.

DITTA'NDER, *n. s.* The same with pepperwort. See LEPIDIUM.

DI'TTANY, *n. s.* Lat. *dictamnus.*

Dittany hath been renowned, for many ages, upon the account of its sovereign qualities in medicines. It is generally brought over dry from the Levant. *Miller.*

Virgil reports of *dittany*, that the wild goats eat it when they are shot with darts. *More's Antidote against Atheism.*

DITTANY, BASTARD, a species of marrubium.

DITTANY, OF CRETE. See ORIGANUM.

DITTANY, WHITE. See DICTAMNUS.

DITTEAH, a town and fortress of Bundelcund, Hindostan, about a mile and a half long, and nearly as much in breadth. It is populous and well-built; the houses being chiefly of stone, and tiled. It is surrounded by a stone wall and gates. On an eminence, which overlooks a handsome lake, stands the rajah's palace. The surrounding district yields an annual revenue of between £12,000 and £15,000 sterling. This place is mentioned in early history, and the rajah, who is one of the British allies, boasts of its having belonged to his family for several centuries. During the reign of Aurenzebe, Ditteah was the capital of Dhoolput Roy, a Bondelah rajah of some celebrity.

DITTO, in books of accounts, usually written Do, signifies the aforementioned. The word is corrupted from the Italian detto, 'the said:' as in our law-phrase, 'the said premises,' meaning the same as were before-mentioned.

DI'TTY, *n. s.* } Sax. tetit; Swed. *dickt;*
DI'TTIED, *adj.* } Germ. and Dutch, *dicht*, from Goth. *tia* to show, or, according to Minsheu, from Lat. *dictum*, a thing said or delivered as an oration. A poem to be sung; a song. Adapted to music.

Although we lay altogether aside the consideration of *ditty* or matter, the very harmony of sounds being framed in due sort, and carried from the ear to the spiritual faculties of our souls, is by a native puissance and efficacy, greatly available to bring to a perfect temper whatsoever is there troubled. *Hooker.*

Being young, I framed to the harp
Many an English *ditty* lovely well,
And gave the tongue a helpful ornament.
Shakspeare.

Strike the melodious harp, shrill timbrels ring,
And to the warbling lute soft *ditties* sing. *Sandys.*

He, with his soft pipe, and smooth *dittied* song,
Well knows to still the wild winds when they roar.
Milton.

His annual wound in Lebanon, allured
The Syrian damsels to lament his fate,
In amorous *ditties*, all a summer's day. *Id.*

They will be sighing and singing under thy inexorable windows lamentable *ditties*, and call thee cruel. *Dryden.*

DIU, or DIVIPA, THE ISLAND, an island and harbour at the southern extremity of the Gujrat Peninsula, in lat. 20° 43′ N., long. 71° E. The island is not above four miles long by one broad, but formerly contained a Hindoo temple, dedicated to Somnath, celebrated for its sanctity and riches. This was plundered in 1025 by sultan Mahmood of Ghizni, who sent the fragments of the image to Mecca and Medina. The Portuguese obtained possession of Diu in 1515, and were allowed by the sultan of Gujrat to fortify it, about twenty years after. In 1670, however, their establishment was surprised and plundered by the Muscut Arabs, and has since dwindled away. The island has a good port.

DIVAL, in heraldry, the herb nightshade, used by such as blazon by flowers and herbs, instead of colors and metals, for sable or black.

DIVALIA, in Roman antiquity, a feast held in honor of the goddess ANGERONA; also called ANGERONALIA. See these articles.

DIVA'N., *n. s.* Arab. *deuan;* Turk. *divan*, probably from Heb. דין, to judge. The council of Oriental princes: any council assembled.

Forth rushed in haste the great consulting peers,
Raised from the dark *divan*, and with like joy
Congratulant approached him. *Milton.*

Swift to the queen the herald Medon ran,
Who heard the consult of the dire *divan.*
Pope's Odyssey.

DIVAN, a court of justice among the eastern nations, particularly the Turks. The word signifies the same with sofa in the Turkish dialect. There are two sorts of divans; that of the grand signior, called the council of state, which consists of seven of the principal officers of the empire; and that of the grand vizier, composed of six other viziers, or counsellors of state, the chancellor, and secretaries of state, for the distribution of justice.

DIVANDUROW, the name of seven islands in the Indian Ocean, three miles north of the Maldives, and twenty-four from the coast of Malabar, almost opposite to Cananore.

DIVA'RICATE, *v. a.* & *v. n.* } Lat. *divari-*
DIVARICA'TION, *n. s* } *catus.* To divide into two; to be parted into two; to become bifid. Divarication is, division into two or more.

To take away all doubt, or any probable *divarication*, the curse is plainly specified. *Browne's Vulgar Errours.*

Dogs running before their masters, will stop at a *divarication* of the way, till they see which hand their masters wil. take. *Ray.*

A slender pipe is produced forward towards the throat, whereinto it is at last inserted, and is there *divaricated*, after the same manner as the spermatick vessels. *Grew.*

The partitions are strained across: one of them *divaricates* into two, and another into several small ones. *Woodward.*

DIVE, *v. a.* & *v. n.* } Sax. ᵹippan; Teut.
DI'VER, *n. s.* } *tufan*; Ital. *toffo*, from Gr. ἐυπτω, to dip. To explore by diving: as a neuter verb, to sink, or go under water; hence, to enter deeply into a question, or into business, and to go beyond sight or observation.

Dive, thoughts, down to my soul.
Shakspeare.

Sweet prince, the untainted virtue of your years
Hath not yet *dived* into the world's deceit,
Nor can distinguish. *Id. Richard III.*

Crocodiles defend those pearls which lie in the lakes: the poor Indians are eaten up by them, when they *dive* for the pearl. *Raleigh's History.*

I am not yet informed, whether, when a *diver* diveth, having his eyes open, and swimmeth upon his back, he sees things in the air greater or less.
Bacon's Natural History.

The wits that *dived* most deep, and soared most high,
Seeking man's powers, have found his weakness such.
Davies.

He would have him, as I conceive it, to be no superficial and floating artificer; but a *diver* into causes, and into the mysteries of proportion.
Wotton's Architecture.

He performs all this out of his own fund, without *diving* into the arts and sciences for a supply.
Dryden.

Whensoever we would proceed beyond those simple ideas, and *dive* farther into the nature of things, we fall presently into darkness and obscurity. *Locke.*

You should have *dived* into my inmost thoughts.
Philips.

Then Brutus, Rome's first martyr, I must name;
The Curtii bravely *dived* the gulph of fame.
Denham.

Perseverance gains the *diver's* prize.
Pope's Dunciad.

That the air in the blood-vessels of live bodies has a communication with the outward air, I think, seems plain, from the experiments of human creatures being able to bear air of much greater density in *diving*, and of much less upon the tops of mountains, provided the changes be made gradually. *Arbuthnot.*

But *dive* into this subject as deep as thou canst. Examine thyself; and this knowledge of that which passes within thee will be of more use to thee than the knowledge of all that passes in the world.
Mason.

Led by the sage, Lo! Britain's sons shall guide
Huge sea-balloons beneath the tossing tide;
The *diving* castles, roofed with spheric glass,
Ribbed with strong oak, and barred with bolts of brass. *Darwin.*

To be the Table Talk of clubs up stairs,
To which th' unwashed artificer repairs,
To indulge his genius after long fatigue,
By *diving* into cabinet intrigue. *Cowper.*

DIVER, in ornithology. See COLYMBUS.

DIVING, the art or act of descending under water to considerable depths, and remaining there for some time. The uses of diving are very considerable, particularly in the fishing for pearls, corals, sponges, &c. Various methods have been proposed, and machines contrived, to render the business of diving more safe and easy. The great point is to furnish the diver with fresh air; without which he must either make a short stay under water or perish. Those who dive for sponges in the Mediterranean, assist themselves by carrying down sponges dipt in oil in their mouths. But considering the small quantity of air that can be contained in the pores of the sponge, and how much that little will be contracted by the pressure of the incumbent water, such a supply cannot long maintain the respiration of the diver. It is found by experiment, that a gallon of air included in a bladder, and by a pipe reciprocally inspired and expired by the lungs, becomes unfit for respiration in little more than one minute: for though its elasticity be but little altered in passing the lungs, yet it loses its vivifying spirit, and is rendered effete. A naked diver, Dr. Halley assures us, without a sponge, cannot remain above a couple of minutes enclosed in water, nor much longer with one, without suffocating; nor, without long practice, near so long: persons not accustomed to dive, beginning to be stifled in about half a minute. Hence, where there has been occasion to continue long at the bottom, some have contrived double flexible pipes, to circulate air down into a cavity, enclosing the diver as with armour, both to furnish air and to bear off the pressure of the water, as well as to give room to his breast to dilate upon inspiration; the fresh air being forced down one of the pipes with bellows, and returning by the other. But this method is impracticable when the depth surpasses three fathoms; the water embracing the bare limbs so closely as to obstruct the circulation of the blood in them; and pressing so strongly on all the junctures where the armour is made tight with leather, that, if there be the least defect in any of them, the water rushes in, and instantly fills the whole engine, to the great danger of the diver's life. People being accustomed to the water from their infancy, will however at length be enabled, not only to stay much longer under water than the time above mentioned, but put on a kind of amphibious nature, so that they seem to have the use of all their faculties as well when their bodies are immersed in water as when on dry land. Most savage nations are remarkable for this. The inhabitants of the South Sea islands are such expert divers, that, when a nail or any piece of iron is thrown overboard, they instantly jump into the sea after it, and never fail to recover it, notwithstanding the quick descent of the metal. Even among civilized nations, many persons have been found capable of continuing an incredible length of time below water. The most remarkable instance of this kind is the famous Sicilian diver Nicolo Pesce. See PESCE.

To obviate the inconveniences of diving different instruments have been contrived, of which the chief is the diving bell. The common bell is made in form of a truncated cone, the smaller base being closed, and the larger open. It is poised with lead; and so suspended, that the vessel may sink full of air, with its open basis downward, and as near as may be in a situation parallel to the horizon, so as to close with the surface of the water all at once. Under this covercle the diver sitting, sinks down with the included air to the depth desired: and if the cavity of the vessel can contain a tun of air, a single man may remain a full hour, without much inconvenience, at five or six fathoms depth. But the lower he goes, the more the included air contracts itself, according to the

weight of the water which compresses it; so that at thirty-three feet deep the bell becomes half full of water, the pressure of the incumbent water being then equal to that of the atmosphere; and at all other depths the space occupied by the compressed air in the upper part of the bell will be to the under part of its capacity filled with water as thirty-three feet to the surface of the water in the bell below the common surface of it. One inconvenience that attends this condensed air is found in the ears, within which there are cavities which open only outwards, and that by pores so small as not to give admission even to the air itself, unless they be dilated and distended by a considerable force. Hence, on the first descent of the bell, a pressure begins to be felt on the ear; which, by degrees, grows painful, till, the force overcoming the obstacle, what constringes these pores yields to the pressure, and, letting condensed air slip in, ease presently ensues. The bell descending lower, the pain is renewed, and again eased in the same manner. But the greatest inconvenience of this engine is, that the water entering it, contracts the bulk of air into so small a compass, that it soon heats and becomes unfit for respiration, so that there is a necessity for its being drawn up to recruit it; besides the uncomfortable situation of the diver almost covered with water.

To obviate the difficulties of the foregoing kind of diving bell, Dr. Halley contrived further apparatus, whereby not only to recruit and refresh the air from time to time, but also to keep the water wholly out of it at any depth. The manner in which this was effected, he relates in the following words:—'The bell I made use of was of wood, containing about sixty cubic feet in its concavity, and was of the form of a truncated cone, whose diameter at the top was three feet and at the bottom five. This I coated with lead so heavy that it would sink empty; and I distributed the weight so about its bottom, that it would go down in a perpendicular direction, and no other. In the top I fixed a strong but clear glass, as a window, to let in the light from above, and likewise a cock to let out the hot air that had been breathed; and below, about a yard under the bell, I placed a stage which hung by three ropes, each of which was charged with about 100 weight to keep it steady. This machine I suspended from the mast of a ship by a sprit, which was sufficiently secured by stays to the mast head, and was directed by braces to carry it overboard clear of the ship's side, and to bring it again within board as occasion required. To supply air when under water, I caused a couple of barrels, of about thirty-six gallons each, to be cased with lead, so as to sink empty, each of them having a bung-hole in its lowest part to let in the water, as the air in them condensed on their descent; and to let it out again when they were drawn up full from below. And to a hole in the uppermost part of these barrels I fixed a leathern trunk or nose, well liquored with bees' wax and oil, and long enough to fall below the bung-hole, being kept down by a weight appended: so that the air in the upper part of the barrels could not escape unless the lower ends of these hose were first lifted up. The air-barrels being thus prepared, I fitted them with tackle proper to make them rise and fall alternately, after the manner of two buckets in a well, which was done with so much ease, that two men, with less than half their strength, could perform all the labor required: and in their descent they were directed by lines fastened to the under edge of the bell, which passed through rings on both sides the leathern hose in each barrel; so that, sliding down by these lines, they came readily to the hand of a man who stood on the stage on purpose to receive them, and to take up the ends of the hose into the bell. Through these hose, as soon as their ends came above the surface of the water in the barrels, all the air that was included in the upper parts of them was blown with great force into the bell; whilst the water entered at the bung-holes below, and filled them: and as soon as the air of one barrel had been thus received, upon a signal given, that was drawn up, and at the same time the other descended; and, by an alternate succession, furnished air so quick, and in so great plenty, that I myself have been one of five who have been together at the bottom in nine or ten fathom water, for above an hour and a half at a time, without any ill consequence: and I might have continued there as long as I pleased, for any thing that appeared to the contrary. Besides, the whole cavity of the bell was kept entirely free from water, so that I sat on a bench which was diametrically placed near the bottom, wholly dressed, with all my clothes on. I only observed that it was necessary to be let down gradually at first, as about twelve feet at a time, and then to stop and drive out the water that entered, by receiving three or four barrels of fresh air before I descended further. But being arrived at the depth designed, I then let out as much of the hot air that had been breathed, as each barrel would replenish with cool, by means of the cock at the top of the bell; through whose aperture, though very small, the air would rush with so much violence, as to make the surface of the sea boil, and to cover it with a white foam, notwithstanding the weight of the water over us. Thus I found that I could do any thing that required to be done just under us; and that, by taking off the stage, I could, for a space as wide as the circuit of the bell, lay the bottom of the sea so far dry as not to be overshoes thereon. And, by the glass window, so much light was transmitted, that when the sea was clear, and especially when the sun shone, I could see perfectly well to write or read; much more to fasten or lay hold on any thing under us that was to be taken up. And, by the return of the air barrels, I often sent up orders, written with an iron pen on small plates of lead, directing how to move us from place to place, as occasion required. At other times, when the water was troubled and thick, it would be as dark as night below; but in such cases I have been able to keep a candle burning in the bell as long as I pleased, notwithstanding the great expense of air necessary to maintain flame. By an additional contrivance, I have found it not impracticable for a diver to go out of an engine to a good distance from it, the air being conveyed to him with a continued

stream, by small flexible pipes; which pipes may serve as a clue to direct him back again when he would return to the bell.' Plate, Diving Bells, fig. 1, shows Dr. Halley's diving bell. D B L R M represents the body of the bell; D, the glass which serves as a window. B, the cock for letting out the air which has been breathed. L M, the seats. C, one of the air barrels. I, another diver at a distance from the bell, and breathing through the flexible tube F P, of which F is a stop-cock, which I can turn at pleasure to prevent the air being forced back into the bell by the pressure of the water when he stoops below the mouth of the bell. This diver is supposed to have a head-piece of lead, made to fit quite close about his shoulders: this head-piece was capable of containing as much air as would supply him for a minute or two.

Mr. Triewald, F.R.S., military architect to the king of Sweden, invented a diving bell, fig. 2, which, for a single person, is thought to be more eligible than Dr. Halley's, and is constructed as follows:—A B is the bell, which is sunk by lead weights D D, hung to its bottom. This bell is of copper, tinned all over in the inside, which is illuminated by two strong convex lenses, G, G, with copper lids, H, H, to defend them. The iron plate, E, serves the diver to stand on when he is at work; and is suspended at such a distance from the bottom of the bell, by the chains F F, that when the diver stands upright his head is just above the water in the bell, where the air is much better than higher up, because it is colder, and consequently more fit for respiration. But as the diver must always be within the bell, and his head of course in the upper part, the inventor has contrived, that even there, when he has breathed the hot air as long as he can, he may, by means of a spiral copper tube, *f b c b c*, placed close to the inside of the bell, draw the cooler and fresher air from the lower parts.

But the greatest improvement which the diving bell has received was from the late Mr. Spalding, of Edinburgh. A section of his improved diving bell is represented in fig. 3. This construction is designed to remedy some inconveniences of Dr. Halley's, which are very evident, and of very dangerous tendency. By Dr. Halley's construction, the sinking or raising of the bell depends entirely on the people who are at the surface of the water; and as the bell, even when in the water, has a very considerable weight, the raising it not only requires a great deal of labor, but there is a possibility of the rope breaking by which it is raised, and thus every person in the bell would inevitably perish. And as there are, in many places of the sea, rocks which lie at a considerable depth, the figure of which cannot possibly be perceieved from above, there is danger that some of their ragged prominences may catch hold of one of the edges of the bell in its descent, and thus overset it before any signal can be given to those above, which would infallibly be attended with the destruction of the people in the bell: and as it must always be unknown, before trial, what kind of a bottom the sea has in any place, it is plain that, without some contrivance to obviate this last danger, the descent in Dr. Halley's diving bell is not at all eligible. How these inconveniencies are remedied by Spalding's construction will be easily understood from the following description.—A B C D represents a section of the bell, which is made of wood; *e*, *e*, are iron hooks, by means of which it is suspended by ropes Q B F *e*, and Q A E R *e*, and Q S, as expressed in the figure: *c*, *c*, are iron hooks, to which are appended lead weights, that keep the mouth of the bell always parallel to the surface of the water, whether the machine, taken altogether, is lighter or heavier than an equal bulk of water. By these weights alone, however, the bell would not sink: another is therefore added, represented at L, and which can be raised or lowered at pleasure, by means of a rope passing over the pulley *a*, and fastened to one of the sides of the bell at M. As the bell descends, this weight, called the balance weight, hangs down a considerable way below the mouth of the bell. In case the edge of the bell is catched by any obstacle, the balance weight is immediately lowered down so that it may rest upon the bottom. by this means the bell is lightened so that all danger of oversetting is removed; for being lighter, without the balance weight, than an equal bulk of water, it is evident that the bell will rise, as far as the length of the rope affixed to the balance weight will allow it. This weight therefore will serve as a kind of anchor to keep the bell at any particular depth which the divers may think necessary; or, by pulling it quite up, the descent may be continued to the very bottom. By another very ingenious contrivance, Mr. Spalding rendered it possible for the divers to raise the bell, with all the weights appended to it, even to the surface, or to stop at any particular depth, as they think proper; and thus they could still be safe, even though the rope designed for pulling up the bell was broke. For this purpose the bell is divided into two cavities, both of which are made as tight as possible. Just above the second bottom, E F, are small slits in the sides of the bell; through which the water, entering as the bell descends, displaces the air originally contained in this cavity, which flies out at the upper orifice of the cock H. When this is done, the divers stop the cock; so that if any more air was to get into the cavity A E F B, it could no longer be discharged through the orifice H as before. When this cavity is full of water the bell sinks; but when a considerable quantity of air is admitted it rises. It therefore the divers have a mind to raise themselves, they turn the cock V, by which a communication is made between the upper and under cavities of the bell. The consequence of this is, that a quantity of air immediately enters the upper cavity, forces out a quantity of the water contained in it, and thus renders the bell lighter by the whole weight of the water which is displaced. Thus, if a certain quantity of air is admitted into the upper cavity, the bell will descend very slowly; if a greater quantity, it will neither ascend nor descend, but remain stationary; and if a larger quantity of air is still admitted, it will arise to the top. It is to be observed, however, that the air which is thus let out into the upper cavity must be immediately supplied from the air-barrel; from which the air is to be let

out very slowly, or the bell will rise to the top with so great velocity, that the divers will be in danger of being shaken out of their seats. But, by following these directions, every possible accident may be prevented, and people may descend to great depths without the least apprehension of danger. The bell also becomes so easily manageable in the water, that it may be conducted from one place to another by a small boat with the greatest ease, and with perfect safety to those who are in it. Instead of wooden seats used by Dr. Halley, Mr. Spalding made use of ropes suspended by hooks *b, b, b*; and, on these ropes, the divers may sit without any inconvenience. K K are two windows made of thick strong glass, for admitting light to the divers. N represents an air-cask with its tackle, and O C P the flexible pipe through which the air is admitted to the bell. In the ascent and descent of this cask, the pipe is kept down by a small weight appended, as in Dr. Halley's machine. R is a small cock by which the hot air is discharged as often as it becomes troublesome.

A considerable modern improvement is that of supplying air to a diving-bell, by means of a syringe or pump, which forces the air down in a continual stream into the bell, whence it escapes from beneath the lower edges of the bell, or from a waste pipe, as fast as it is supplied. In this way the air is kept very pure, and the people in the bell have no kind of trouble to obtain a supply. Mr. Smeaton was the first who put in practice the method to which we allude, though it had been frequently proposed by other inventors. His first attempt was in 1786, in shallow water, the bell being only intended to enable workmen to examine and repair the foundations of a bridge at Hexham, in Northumberland.

Mr. Smeaton, a few years afterwards, constructed another bell upon the same principle, for the works at Ramsgate harbour. It was used to raise up large stones, which had formerly been thrown into the sea around the base of the pier.

The bell was made of cast iron, of sufficient weight to sink without any extra ballast. In the top were lenses for the admission of light, and a strong shackle for the chain by which the bell was suspended. A strong leathern pipe was connected with the top of the bell, to convey air into it from an air-pump placed either in a boat or on the shore.

This kind of diving-bell has since been applied to the purposes of building foundations of masonry in deep water, under the direction of the late Mr. Rennie, who constructed machinery to move the bell under water in any direction, and which acts with such facility, that the masons in the bell make great despatch in laying the stones. It was used in Plymouth Sound to sweep the bottom for old anchors, &c. At Houth, in Dublin county, Ireland, the foundations for the pier were wholly laid by this machine. In many parts the rocky bottom was too uneven to work upon, and it was then necessary to blast it with powder. The divers bored the hole in the rock, and placed the powder in a tin cartridge, which was well secured in the hole, by running in small fragments of stone. A small tin pipe was affixed to the canister, long enough to reach above the surface of the water. When all was prepared, the bell was drawn up out of the way, and a nail or other small piece of iron heated red hot, was dropped into the tin pipe, thereby to descend to the powder.

As the diving bell is, however, in any stage of improvement, necessarily very large and unwieldy, several attempts have been made to encase a man sufficiently to enable him to breathe and bear the pressure of the water. Among these the most successful is that of Klingert of Breslau, which is made of strong tin plate, in the form of a cylinder, which goes over the diver's head, and which consists of two parts, that he may conveniently thrust his arms through it and put it on; also a jacket with short sleeves, and drawers of strong leather. All these being watertight, and closely jointed round the body of the diver, secure every part of him, but his arms and legs, from the pressure of the water, which, at the depth of twenty feet, will occasion no inconvenience to these parts. Plate, Diving Bells, &c., fig. 4, represents the diver covered with the harness and drawers. Figs. 5 and 6 are representations of the cylinder, the diameter of which is equal to the breadth of a man at the top of the hipbone. It is fifteen inches in height, has a globular top, and is made of the strongest tin plate. In the inside of the cylinder, at *a*, is a strong broad iron hoop, to enable it to withstand better the pressure of the water; and in the inside of the top there are two pieces of a strong hoop of the same kind, placed over each other in the form of a cross at *b*; a strong ring of brass wire is soldered upon the outside at *c*, that the jacket may be fastened to it with an elastic bandage, to prevent it from slipping downwards; at *d d* are the upper halves of the apertures for the arms; and *e, e*, are holes to afford light, and into which the eye-glasses are screwed: *f* is the opening into which the mouth-piece of the breathing-pipe is screwed, and *g* is an aperture for looking through, as well as for the purpose of breathing when out of the water, and which, by means of the cover *h* suspended from it, can be screwed up before the diver enters the water.

The lower part of the cylinder, which is also fifteen inches in height, is strengthened at *i* and *k* by iron hoops on the inside, in the same manner as the former. To the lower hoop *k* are soldered four small rings, to which are fastened strong leather straps, three inches in breadth, that can be buckled across over the shoulder, and support the whole machine; *l, l*, are the under halves of the apertures for the arms; *m* is also a ring of brass wire soldered to the cylinder, which serves to keep fast the jacket when buckled on, and to support the upper cylinder *d d b*, which slips over the under one; and on that account the under one is a little smaller, so as to fit into the upper one: there is also another such ring at *n*, in order to prevent the drawers from falling down.

At *o* is a strong semicircular piece of iron, the use of which is to prevent the drawers, when pressed by the water, from touching the under part of the body, otherwise the pressure, even at the depth of six feet, would be insupportable. As it is not possible to sew the leather so closely

as to prevent water from forcing its way through the seams, a small pump is suspended at *p* for the purpose of pumping out the water, when it has risen to the height of a few inches in the lower cylinder. Four hooks, *q*, *q*, *q*, *q*, soldered to the lower part of the cylinder, are for the purpose of suspending weights from them.

The jacket *r* (fig. 4), with short sleeves that cover the upper part of the arms, serves to prevent the water from penetrating through the joining of the cylinders where the one is inserted into the other, as also through the holes for the arms, as it is bound fast round both parts of the cylinder, and likewise round the arms. The case is the same with the drawers, which are bound close round the knees.

Fig. 7 represents a brass elastic bandage, employed for fastening on the jacket; and which, when hooked together, is screwed fast by means of the screw *s*, three inches in length; a brass bandage is here used, because leather is apt to stretch, and on that account might be dangerous.

The reservoir *a* (fig. 4), applied in such a manner that it can be screwed off, is for the purpose of collecting the small quantity of water that might force itself into the breathing pipe when long used, and which otherwise would be in continual motion, and render breathing disagreeable.

A man, named Frederick William Joachim, a huntsman by profession, dived in the above apparatus into the Oder, near Breslau, where the water is of considerable depth, and the current strong, on the 24th of June, 1797, before a great number of spectators, and sawed through the trunk of a tree which was lying at the bottom.

The DIVING BLADDER is a machine invented by Borelli, and by him preferred, though without much reason, to the diving bell. It is a globular vessel of brass or copper, about two feet in diameter, which contains the diver's head. It is fixed to a goat's skin habit exactly fitted to his person. Within the vessel are pipes, by means of which a circulation of air is contrived; and the person carries an air-pump by his side, by which he can make himself heavier or lighter as fishes do, by contracting or dilating their air bladder. By these means he thought all the objections to which other diving machines are liable were entirely obviated, and particularly that of want of air; the air which had been breathed, being, as he imagined, deprived of its noxious qualities by circulating through the pipes. These advantages, however, it is evident, are only imaginary. The diver's limbs, being defended from the pressure of the water only by a goat's skin, would infallibly be crushed if he descended to any considerable depth; and, from the discoveries now made, by Dr. Priestley and others, it is abundantly evident, that air, which is once rendered foul by breathing, cannot, in any degree, be restored by circulation through pipes.

The following description of a DIVING-VESSEL invented by Mr. Bushnell, of Connecticut, is given in the Philosophical Transactions of America:—The external shape of the sub-marine vessel bore some resemblance to two upper tortoise-shells, of equal size, joined together; the place of entrance into the vessel being represented by the opening made by the swell of the shells, at the head of the animal. The inside was capable of containing the operator, and air sufficient to support him thirty minutes, without receiving fresh air. At the bottom, opposite to the entrance, was fixed a quantity of lead for ballast. At one edge, which was directly before the operator, who sat upright, was an oar for rowing forward or backward. At the other edge was a rudder for steering. An aperture, at the bottom, with its valve, was designed to admit water, for the purpose of descending; and two brass forcing-pumps served to eject the water within, when necessary for ascending. At the top there was likewise an oar for ascending or descending, or continuing at any particular depth. A water-gauge, or barometer, determined the depth of descent, a compass directed the course, and a ventilator within supplied the vessel with fresh air, when on the surface.

The entrance into the vessel was elliptical, and so small as barely to admit a person. This entrance was surrounded with a broad elliptical iron band, the lower edge of which was let into the wood, of which the body of the vessel was made, in such a manner as to give its utmost support to the body of the vessel against the pressure of the water. Above the upper edge of this iron band there was a brass crown, or cover, resembling a hat with its crown and brim, which shut water-tight upon the iron band; the crown was hung to the iron band with hinges, so as to turn over sideways when opened. To make it perfectly secure when shut, it might be screwed down upon the band by the operator, or by a person without.

There were in the brass crown three round doors, one directly in front, and one on each side, large enough to put the hand through. When open, they admitted fresh air; their shutters were ground perfectly tight into their places with emery, hung with hinges, and secured in their places when shut. There were likewise several small glass windows in the crown for looking through, and for admitting light in the day-time, with covers to secure them. There were two air-pipes in the crown. A ventilator within drew fresh air through one of the air-pipes, and discharged it into the lower part of the vessel; the fresh air introduced by the ventilator expelled the impure light air through the other air-pipe. Both air-pipes were so constructed, that they shut themselves whenever the water rose near their tops, so that no water could enter through them, and opened themselves immediately after they rose above the water.

The vessel was chiefly filled with lead fixed to its bottom; when this was sufficient, a quantity was placed within, more or less, according to the weight of the operator; its ballast made it so stiff, that there was no danger of oversetting. The vessel, with all its appendages, and the operator, was sufficient to settle it very low in the water. About 200 lbs. of the lead, at the bottom for ballast, would be let down forty or fifty feet below the vessel; this enabled the operator to rise instantly to the surface of the water, in case of accident.

When the operator would descend, he placed his foot on the top of a brass valve, depressing

it, by which he opened a large aperture in the bottom of the vessel, through which the water entered at his pleasure; when he had admitted a sufficient quantity, he descended very gradually; if he admitted too much, he ejected as much as was necessary to obtain an equilibrium, by the two brass forcing-pumps, which were placed at each hand. Whenever the vessel leaked, or he would ascend to the surface, he also made use of these forcing-pumps. When the skilful operator had obtained an equilibrium, he could row upward, or downward, or continue at any particular depth, with an oar, placed near the top of the vessel, formed upon the principle of the screw, the axis of the oar entering the vessel; by turning the oar one way, he raised the vessel, by turning it the other way he depressed it.

A glass tube, eighteen inches long, and one inch in diameter, standing upright, its upper end closed, and its lower end, which was open, screwed into a brass pipe, through which the external water had a passage into the glass tube, served as a water-gauge, or barometer. There was a piece of cork, with phosphorus on it, put into the water-gauge. When the vessel descended, the water rose in the water-gauge, condensing the air within, and bearing the cork, with its phosphorus, on its surface. By the light of the phosphrous, the ascent of the water in the gauge was rendered visible, and the depth of the vessel under water ascertained by a graduated line.

An oar, formed upon the principle of the screw, was fixed in the fore part of the vessel; its axis entered the vessel, and being turned one way, rowed the vessel forward, but being turned the other way, rowed it backward; it was made to be turned by the hand or foot.

A rudder, hung to the hinder part of the vessel, commanded it with the greatest ease. The rudder was made very elastic, and might be used for rowing forward. Its tiller was within the vessel, at the operator's right hand, fixed, at a right angle, on an iron rod, which passed through the side of the vessel; the rod had a crank on its outside end, which commanded the rudder, by means of a rod extending from the end of the crank to a kind of tiller, fixed upon the left hand of the rudder. Raising and depressing the first-mentioned tiller, turned the rudder as the case required.

A compass, marked with phosphorus, directed the course, both above and under the water; and a line and lead sounded the depth when necessary.

The internal shape of the vessel, in every possible section of it, verged towards an ellipsis, as near as the design would allow, but every horizontal section, although elliptical, yet as near to a circle as could be admitted. The body of the vessel was made exceedingly strong; and to strengthen it as much as possible, a firm piece of wood was framed, parallel to the conjugate diameter, to prevent the sides from yielding to the great pressure of the incumbent water, in a deep immersion. This piece of wood was also a seat for the operator.

Every opening was well secured. The pumps had two sets of valves. The aperture at the bottom, for admitting water, was covered with a plate, perforated full of holes, to receive the water, and prevent any thing from choking the passage, or stopping the valve from shutting. The brass valve might likewise be forced into its place with a screw, if necessary. The air-pipes had a kind of hollow sphere, fixed round the top of each, to secure the air-pipe valves from injury; these hollow spheres were perforated full of holes, for the passage of the air through the pipes; within the air-pipes were shutters to secure them, should any accident happen to the pipes, or the valves on their tops.

Wherever the external apparatus passed through the body of the vessel, the joints were round, and formed by brass pipes, which were driven into the wood of the vessel; the holes through the pipes were very exactly made, and the iron rods, which passed through them, were turned in a lathe to fit them; the joints were also kept full of oil, to prevent rust and leaking. Particular attention was given to bring every part, necessary for performing the operations, both within and without the vessel, before the operator, and as conveniently as could be devised; so that every thing might be found in the dark, except the water gauge and the compass, which were visible by the light of the phosphorus, and nothing required the operator to turn to the right hand, or to the left, to perform any thing necessary.

Description of a magazine, and its appendages, designed to be conveyed, by the submarine vessel, to the bottom of a ship:—In the fore part of the brim of the crown of the submarine vessel was a socket, and an iron tube, passing through the socket; the tube stood upright, and could slide up and down in the socket, six inches; at the top of the tube was a wood-screw, fixed by means of a rod, which passed through the tube, and screwed the wood-screw fast upon the top of the tube. By pushing the wood-screw up against the bottom of a ship, and turning it at the same time, it would enter the planks; driving would also answer the same purpose: when the wood-screw was firmly fixed, it could be cast off by unscrewing the rod, which fastened it upon the top of the tube.

Behind the sub-marine vessel was a place, above the rudder, for carrying a large powder-magazine; this was made of two pieces of oak timber, large enough, when hollowed out, to contain 150 lbs. of powder, with the apparatus used in firing it, and was secured in its place by a screw, turned by the operator. A strong piece of rope extended from the magazine to the wood-screw above-mentioned, and was fastened to both. When the wood-screw was fixed, and to be cast off from its tube, the magazine was to be cast off likewise by unscrewing it, leaving it hanging to the wood-screw; it was lighter than the water, that it might rise up against the object to which the wood-screw and itself were fastened.

Within the magazine was an apparatus, constructed to run any proposed length of time, under twelve hours; when it had run out its time, it unpinioned a strong lock, resembling a gun-lock, which gave fire to the powder. This apparatus was so pinioned, that it could not possibly move, till, by casting off the magazine from the vessel, it was set in motion.

The skilful operator could swim so low on the surface of the water, as to approach very near a ship, in the night, without fear of being discovered, and might, if he chose, approach the stem or stern above water, with very little danger. He could sink very quickly, keep at any depth he pleased, and row a great distance in any direction he desired, without coming to the surface; and, when he rose to the surface, he could soon obtain a fresh supply of air, when, if necessary, he might descend again, and pursue his course.

The first experiment made was with about two ounces of gunpowder, which were exploded four feet under water, to prove to some of the first personages in Connecticut that powder would take fire under water.

The second experiment was made with two pounds of powder, enclosed in a wooden bottle, and fixed under a hogshead, with a two-inch oak plank between the hogshead and the powder; the hogshead was loaded with stones as deep as it could swim; a wooden pipe descending through the lower head of the hogshead, and through the plank, into the powder contained in the bottle, was primed with powder. A match put to the priming exploded the powder, which produced a very great effect, rending the plank into pieces, demolishing the hogshead, and casting the stones and the ruins of the hogshead, with a body of water, many feet into the air, to the astonishment of the spectators. This experiment was likewise made for the satisfaction of the gentlemen abovementioned.

There were afterwards made many experiments of a similar nature, some of them with large quantities of powder; they all produced very violent explosions, much more than sufficient for any purpose had in view.

In the first essays with the sub-marine vessel, the inventor took care to prove its strength to sustain the great pressure of the incumbent water, when sunk deep, before he trusted any person to descend much below the surface; and he never suffered any person to go under water without having a strong piece of rigging made fast to it, until he found him well acquainted with the operations necessary for his safety. After that, he made him descend, and continue at particular depths, without rising or sinking, row by the compass, approach a vessel, go under her, and fix the wood-screw, mentioned before, into her bottom, &c., until he thought him sufficiently expert to put any design in execution.

It required many trials to make a person of common ingenuity a skilful operator; the first employed was very ingenious, and made himself master of the business, but was taken sick in the campaign of 1776, at New York, before he had an opportunity to make use of his skill, and never recovered his health sufficiently afterwards.

Experiments made with a sub-marine vessel. After various attempts to find an operator to his wish, Mr. Bushnell sent one, who appeared more expert than the rest, from New York, to a fifty-gun ship, lying not far from Governor's Island. He went under the ship, and attempted to fix the wood-screw into her bottom, but struck, as he supposed, a bar of iron, which passes from the rudder-hinge, and is spiked under the ship's quarter. Had he moved a few inches, which he might have done, without rowing, he would probably have found wood where he might have fixed the screw; or, if the ship were sheathed with copper, he might easily have pierced it: but not being well skilled in the management of the vessel, in attempting to move to another place, he lost the ship; after seeking her in vain, for some time, he rowed some distance, and rose to the surface of the water, but found day-light had advanced so far, that he durst not renew the attempt. The adventurer said he could easily have fastened the magazine under the stem of the ship, above water, as he rowed up to the stern, and touched it before he descended. Had he fastened it there, the explosion of 150 lbs. of powder, the quantity contained in the magazine, must have been fatal to the ship. In his return from the ship to New York, he passed near Governor's Island, and thought he was discovered by the enemy on the island; being in haste to avoid the danger he feared, he cast off the magazine, as he imagined it retarded him in the swell, which was very considerable. After the magazine had been cast off one hour, the time the internal apparatus was set to run, it blew up with great violence.

Afterwards, there were two attempts made in Hudson's river, above the city, but they effected nothing. Mr. Fulton, we believe, afterwards improved on this machine in England, but the attempts to use it proved equally abortive.

DIVE'RGE, *v. n.* } Lat. *divergo*. To tend
DIVERGE'NT, *adj.* } various ways from one point.

Homogeneal rays, which flow from several points of any object, and fall perpendicularly on any reflecting surface, shall afterwards *diverge* from so many points. *Newton.*

Thus when the mother-bird on moss-wove nest
Lulls her fond brood beneath her plumy breast
Warmth from her tender heart diffusive springs
And charmed she shields them with *diverging* wings.
Darwin.

DIVERGENT, or DIVERGING LINES, in geometry, are those which constantly recede from each other. They are opposed to convergent, or converging lines, whose distances continually approach nearer to each other, and become still less and less. Those lines which converge the one way, diverge the other.

DIVERGENT RAYS, in optics, are those which, going from a point of the visible object, are dispersed, and continually depart one from another, in proportion as they are removed from the object: in which sense it is opposed to convergent. See OPTICS.

DI'VERS, *adj.* Lat. *diversus*. Several; sundry; more than one. Out of use.

We have *divers* examples in the church of such as, by fear, being compelled to sacrifice to strange gods, repented, and kept still the office of preaching the gospel. *Whitgift.*

The teeth breed when the child is a year and a half old: then they cast them, and new ones come about seven years; but *divers* have backward teeth come at twenty, some at thirty and forty.
Bacon's Natural History.

Time travels in *divers* paces with *divers* persons. I'll tell you who time ambles withal, who time trots withal, who time gallops withal, and who he stands still withal. *Shakspeare.*

DIVERSE', *v. n.* & *adj.* } Lat. *diversus.* See
DIVERS'ITY, *n. s.* } DIVERSIFY. To
DIVERSE'LY, *adv.* } differ: different; in various directions. Diversity, is dissimilitude; variety; distinct existence. Diversely, differently; variously.

A nothir clerenesse is of the sunne, a nothir clerenesse of the moone, and a nothir clerenesse is of sterres, and a sterre *diuersith* fro a sterre in clereness. *Wiclif.* 1 *Cor.* 15.

Mi britheren, deme al ioie whanne ye fallen into *dyurse* temptacions. *Id. James* 4.

Four great beasts came up from the sea, *diverse* one from another. *Dan.* vii. 3.

And for there is so grete *diversite*
In English and in writing of our tonge
So praie I to God, that none misurrte the
Ne the misse-metre for defaute of tonge.
Chaucer. Troilus and Cressida.

Then is there in this *diversity* no contrariety. *Hooker.*

But yet their various and perplexed course,
Observed in *diverse* ages, doth enforce
Men to find out so many eccentrique parts,
Such *diverse* downright lines, such overthwarts
As disproportion that pure form. *Donne.*

Both of them do *diversely* work, as they have their medium *diversely* disposed. *Bacon's Natural History.*

Leicester bewrayed a desire to plant him in the queen's favour, which was *diversely* interpreted by such as thought that great artizan of courts to do nothing by chance, nor much by affection. *Wotton.*

Eloquence is a great and *diverse* thing, nor did she yet ever favour any man so much as to be wholly his. *Ben Jonson.*

They cannot be divided, but they will prove opposite, and, not resting in a bare *diversity*, rise into a contrariety. *South.*

Considering any thing as existing at any determined time and place, we compare it with itself existing at another time, and thereon form the ideas of identity and *diversity*. *Locke.*

William's arm
Could nought avail, however famed in war;
Nor armies leagued, and *diversely* assayed
To curb his power. *Philips.*

On life's vast ocean *diversely* we sail;
Reason the card, but passion is the gale. *Pope.*

The most common *diversity* of human constitutions arises from the solid parts, as to their different degrees of strength and tension. *Arbuthnot on Aliment.*

And in the whole there is a magnificence like that ascribed to Chinese plantation, the magnificence of vast extent and endless *diversity*. *Johnson.*

DIVER'SIFY, *v. a.* } Fr. *diversifier*; Sp.
DIVERSIFICA'TION, *n. s.* } Portug. and Italian *diversificare*, from Lat. *diversum*, i. e. *dis*, diversely, and *verto*, or *verso* to turn, and *facio* to make. To make different; discriminate; variegate: diversification is variety of form, color, or quality; change.

There is, in the producing of some species, a composition of matter, which may be much *diversified*. *Bacon.*

If you consider how variously several things may be compounded, you will not wonder that such fruitful principles, or manners of *diversification*, should generate differing colours. *Boyle on Colours.*

This, which is here called a change of wil., is not a change of his will, but a change in the object, which seems to make a *diversification* of the will, but indeed is the same will *diversified*. *Hale's Origin of Mankind.*

The country being *diversified* between hills and dales, woods and plains, one place more clear, another more darksome, it is a pleasant picture. *Sidney.*

It was easier for Homer to find proper sentiments for Grecian generals, than for Milton to *diversify* his infernal council with proper characters. *Addison's Spectator.*

Nor less attractive is the woodland scene
Diversified with trees of every growth,
Alike yet various. *Cowper.*

DIVE'RT, *v. a.* } Fr. *divertir*; Lat.
DIVE'RSION, *n. s.* } *divertere*, from *dis*
DIVE'RTER, *n. s.* } away, and *verto* to turn.
DIVE'RTISE, *v. a.* } To turn off, or from,
DIVE'RTISEMENT, *n. s.* } a particular course:
DIVE'RTIVE, *adj.* } hence, to amuse; to please; to exhilarate. 'Diversion,' says Dr. Johnson, 'seems to be somewhat lighter than amusement, and less forcible than pleasure.' Divertise is an obsolete synonyme of divert. Divertisement is an old word recently revived, and applied to musical compositions of a particular cast. Divertive is recreative, amusing.

Knots, by the conflux of the meeting sap,
Infect the sound pine, and *divert* his grain,
Tortive and errant, from his course of growth.
Shakspeare.

Frights, changes, horrours,
Divert and crack, rend and deracinate
The unity and married calm of states. *Id.*

Cutting off the tops, and pulling off the buds, work retention of the sap for a time, and *diversion* of it to the sprouts that were not forward. *Bacon's Nat. Hist.*

The kings of England would have had an absolute conquest of Ireland, if their whole power had been employed; but still there arose sundry occasions, which divided and *diverted* their power some other way. *Davies on Ireland.*

Alas, how simple, to these cates compared,
Was that crude apple that *diverted* Eve!
Milton. Paradise Regained.

Angling was, after tedious study, a rest to his mind, a cheerer of his spirits, and a *diverter* of sadness. *Walton.*

Let orators instruct, let them *divertise*, and let them move us; this is what is properly meant by the word salt. *Dryden.*

He finds no reason to have his rent abated, because a greater part of it is *diverted* from his landlord. *Locke*

You for those ends whole days in council sit,
And the *diversions* of your youth forget.
Waller.

How fond soever men are of bad *divertisement*, it will prove mirth which ends in heaviness. *Government of the Tongue.*

What can that man fear, who takes care to please a Being that is so able to crush all his adversaries? a Being that can *divert* any misfortune from befalling him, or turn any such misfortune to his advantage? *Addison's Guardian.*

They *diverted* raillery from improper objects, and gave a new turn to ridicule. *Id. Freeholder*

Such productions of wit and humour as expose vice and folly, furnish useful *diversions* to readers. *Id.*

Nothing more is requisite for producing all the variety of colours, and degrees of refrangibility, than that the rays of light be bodies of different sizes; the least of which may make violet, the weakest and darkest of the colours, and be more easily *diverted* by refracting surfaces from the right course; and the rest, as they are bigger and bigger, make the stronger and more lucid colours, blue, green, yellow, and red, and be more and more difficultly *diverted*. *Newton.*

I would not exclude the common accidents of life, nor even things of a pleasant and *diverting* nature, so they are innocent, from conversation. *Rogers.*

I have ranked this *diversion* of Christian practice among the effects of our contentions. *Decay of Piety.*

DIVEST', or DEVEST', *v. a.* & *n. s.* DIVEST'URE, *n. s.* } Fr. *devestir*; Lat. *devestire*, from *de*, privative, and vestio, to clothe, *à vestis*; Gr. εσθης, a garment. To denude, strip: divesture the act of disrobing or stripping.

Then of his arms Androgeus he *divests*;
His swords, his shield, he takes, and plumed crests. *Denham.*

Let us *divest* the gay phantom of temporal happiness of all that false lustre and ornament in which the pride, the passions, and the folly of men have dressed it up. *Rogers.*

The *divesture* of mortality dispenses them from those laborious and avocating duties which are here requisite to be performed. *Boyle's Seraphick Love.*

DIVI'DE, *v. a.* & *v. n.* DIVID'ABLE, *adj.* DIVI'DANT, *adj.* DIV'IDEND, *n. s.* DIVID'ER, DIVID'UAL, *adj.* } Fr. *diviser*; Span. and Port. *dividir*; Ital. and Lat. *dividere*, from *dis*, diversely, and *video*, to see, a divided thing being seen in more parts than one.—Ainsworth. To part into different pieces; hence to disunite; separate; distribute: as a neuter verb, to sunder; break concord or friendship; differ. A dividend is an allotted share; in arithmetic, however, it is the sum to be divided: dividual is used by Milton for divided; and dividant by Shakspeare, for separable; distinguishable.

Let there be a firmament in the midst of the waters, and let it *divide* the waters from the waters. *Genesis.*

There shall five in one house be *divided*. *Luke.*

Rend us in sunder, thou canst not *divide*
Our bodies so, but that our souls are tied,
And we can love by letters still and gifts,
And thoughts, and dreams; love never wanteth shifts. *Donne.*

Love cools, friendship falls off,
Brothers *divide*. *Shakspeare. King Lear.*

How could communities maintain
Peaceful commerce from *dividable* shores? *Shakspeare.*

Twinned brothers of one womb,
Whose procreation, residence, and birth,
Scarce is *dividant*, touch with several fortunes. *Id.*

According as the body moved, the *divider* did more and more enter into the *divided* body; so it joined itself to some new parts of the medium, or *divided* body, and did in like manner forsake others. *Digby on the Soul.*

She shines,
Revolved on heaven's great axle, and her reign
With thousand lesser lights *dividual* holds,
With thousand thousand stars! *Milton.*

If on such petty merits you confer
So vast a prize, let each his portion share:
Make a just *dividend*; and, if not all,
The greater part to Diomede will fall. *Dryden's Fables.*

You must go
Where seas, and winds, and deserts will *divide* you. *Dryden.*

Cham and Japhet were heads and princes over their families, and had a right to *divide* the earth by families. *Locke.*

Money, the great *divider* of the world, hath, by a strange revolution, been the great uniter of a divided people. *Swift.*

Each person shall adapt to himself his peculiar share, like other *dividends*. *Decay of Piety.*

To remedy this inconvenience, it will be necessary to *divide* their troughs into small compartments, in such a manner, that each of them may be capable of containing water; but this is seldom or never done. *Franklin.*

It so happened that persons had a single office *divided* between them who had never spoken to each other in their lives; until they found themselves, they knew not how, pigging together, heads and points, in the same truckle-bed. *Burke. Character of Lord Chatham.*

DIVIDEND. See ARITHMETIC.

DIVIDEND OF STOCKS is a share of the interest of stocks erected on public funds, as the South Sea, &c., divided among and paid to the adventurers half-yearly.

DIVINE', *v. a.*, *v. n.*, *n. s.*, & *adj.* DIVINA'TION, *n. s.* DIVINE'LY, *adv.* DIVI'NER, *n. s.* DIVINE'NESS, DIVIN'ERESS, *n. s.*, *fem.* DIVIN'ITY, *n. s.* } Fr. *divin*; Ital. Span. and Port. *divino*; Lat. *divinus*; from *divi*, the gods; Gr. διος. See DEITY. To foreknow, foretell, or presage, truly or falsely: as a neuter verb to utter prognostics, or feel presages; to conjecture: divination is the foreseeing, or foretelling, future events, or pretending so to do: diviner and divineress those who make this pretension. Divine, as an adjective, is partaking of the nature of, or proceeding from, God; superhuman; excellent: divinely, a corresponding adverb: divineness and divinity, participation of the nature of God; Godhead: THE Godhead, the Supreme Being.

And it was don whanne we gheden to preir, that a damysel that hadde a spirit of *dyuynacioun* meete us which ghaf greet wynnyng to her lordis in *dyuynyng*. *Wiclif. Dedis.* 16.

Surely there is no enchantment against Jacob, neither is there any *divination* against Israel. *Numbers.*

Certain tokens they noted in birds, or in the entrails of beasts, or by other the like frivolous *divinations*. *Hooker.*

The Grecians most *divinely* have given to the active perfection of men, a name expressing both beauty and goodness, *Id.*

Then is Cæsar and he knit together.——If I were to *divine* of this unity, I would not prophesy so. *Shakspeare.*

If secret powers
Suggest out truth to my *divining* thoughts,
This pretty lad will prove our country's bliss. *Id.*

By Jupiter, an angel! or, if not,
An earthly paragon: behold *divineness*
No elder than a boy. *Id. Cymbeline.*

Hear him but reason in *divinity*,
And, all admiring, with an inward wish
You would desire the king were made a prelate,
Shakspeare.

Give Martius leave to proceed in his discourse; for he spoke like a *divine* in armour.
Bacon's Holy War.

The *divinest* and the richest mind,
Both by art's purchase and by nature's dower,
That ever was from heaven to earth confined.
Davies.

As with new wine intoxicated both,
They swim in mirth, and fancy that they feel
Divinity within them breeding wings,
Wherewith to scorn the earth. *Milton.*

In the very shapes and colours of brute creatures there is a *divine* hand, which disposeth them to his own ends. *Bp. Hall. Contemplations.*

This man born and now up grown,
To shew him worthy of his birth *divine*
And high prediction, henceforth I expose
To Satan. *Milton.*

She fair, *divinely* fair! fit love for gods. *Id.*

The eternal cause in their immortal lines
Was taught, and poets were the first *divines*.
Denham.

Her line
Was hero-make, half human, half *divine*.
Dryden.

His countenance did imprint an awe,
And naturally all souls to his did bow;
As wands of *divination* downward draw,
And point to beds where sovereign gold doth grow.
Id.

The mad *divineress* had plainly writ,
A time should come, but many ages yet,
In which sinister destinies ordain,
A dame should drown with all her feathered train.
Id.

If he himself be conscious of nothing he then thought on, he must be a notable *diviner* of thoughts, that can assure him that he was thinking. *Locke.*

Faith, as we use the word, called commonly *divine* faith, has to do with no propositions but those which are supposed to be *divinely* inspired. *Id.*

When he attributes *divinity* to other things than God, it is only a *divinity* by way of participation.
Stillingfleet.

Is it then impossible to distinguish the *divineness* of this book from that which is human? *Grew.*

The excellency of the soul is seen by its power of *divining* in dreams: that several such *divinations* have been made, none can question who believes the holy writings. *Addison.*

'Tis the *Divinity* that stirs within us,
'Tis Heaven itself that points out an hereafter,
And intimates eternity to man. *Id.*

Vain idols, deities that ne'er before
In Israel's lands had fixed their dire abodes,
Beastly *divinities*, and droves of gods. *Prior.*

A *divine* has nothing to say to the wisest congregation, which he may not express in a manner to be understood by the meanest among them. *Swift.*

God doubtless can govern this machine he could create, by more direct and easy methods than employing these subservient *divinities*. *Cheyne.*

This topick was very fitly and *divinely* made use of by our apostle, in his conference with philosophers, and the inquisitive people of Athens. *Bentley.*

Instructed, you'd explore
Divine contrivance, and a God adore.
Blackmore.

I reduced the study of *divinity* into as narrow a compass as I could; for I determined to study nothing but my Bible, being much unconcerned about the opinions of councils, fathers, churches, bishops, and other men, as little inspired as myself. This mode of proceeding being opposite to the general one, and especially to that of the Master of Peterhouse, who was a great reader, he used to call me αυτοδιδακτος, the self-taught *divine*. *Bp. Watson.*

Glowing, and circumfused in speechless love,
Their full *divinity* inadequate
That feeling to express, or to improve,
The gods become as mortals, and man's fate
Has moments like their brightest. *Byron.*

DIVINATION, in antiquity, was divided by Plato, Aristotle, Plutarch, Cicero, and others, into two species, viz. artificial and natural. Artificial divination was so called, because it was not obtained, or pretended to be obtained, by immediate inspiration, but proceeded upon certain superstitious experiments and observations arbitrarily instituted. Of this sort there were various kinds, as by sacrifices, entrails, flame, cakes, flour, wine, water, birds, lots, verses, omens, &c. In the sacred writings nine different sorts of divination are mentioned. The first performed by the inspection of planets, stars, and clouds. The practisers of this are supposed to be those whom Moses calls מעונן *meonen*, of ענן *anan*, a cloud, Deut. xviii. 10. 2. Those whom the prophet calls in the same place מנחש *menacheseh*, which the vulgate and generality of interpreters render *augur*. 3. Those who in the same place are called מכשף *mecascheph*, which the septuagint and vulgate translate 'a man given to ill practices.' 4. Such augurs whom Moses in the same chapter, ver. 11, calls חובר *hhober*. 5. Those who consult the spirits called Python; or, as Moses expresses it in the same book, שאל אוב 'those who ask questions of Python.' 6. Witches or magicians, whom Moses called ידעני *judeoni*. 7. Those who consult the dead, necromancers. 8. The prophet Hosea, chap. iv. 12, mentions such as consult staves, שאל מקלי; which kind of divination is called rhabdomancy. 9. The last kind is hepatoscopy, or the consideration of the liver. Divination of all kinds being the offspring of credulity, nursed by imposture, and strengthened by superstition, was necessarily an occult science, retained in the hands of the priests and priestesses, the magi, the soothsayers, the augurs, and other like professors, till the time of the coming of Jesus Christ. Since then the pure doctrines of Christianity, and the spirit of philosophy, becoming every day more widely diffused have equally concurred in banishing these visionary opinions.

The following are the principal kinds of divination practised among the ancients. For a more minute description of which see their separate articles. 1. Aeromancy, the art of divining by the air. 2 Astrology; divided into

astrology and judicial. 3. Augury consists in observing the flight, singing, &c., of birds. 4. Chiromancy, the art which pretends to discover, by inspecting the hand, not only the inclinations of a man, but his future destiny also. Geomancy was a divination made by observing the marks or clefts in the earth. 6. Haruspicy was employed in the inspection of the bowels of animals, but principally of victims; and from thence predicting incidents relative to the republic, and the good or bad events of its enterprises. 7. Horoscopy is a branch of ASTROLOGY, which see. 8. Hydromancy is the art of divining by water. The Persians, according to Pliny, invented it; and Pythagoras and Numa Pompilius made great use of it. 9. Physiognomy, or physiognomancy, is a science that pretends to teach the nature, the temperament, the understanding, and the inclinations of men, by the inspection of their countenances, and is therefore thought by many, to be little less frivolous than chiromancy; though Aristotle, and the celebrated Lavater, have written express treatises concerning it. But as it is an undeniable fact, that our passions, especially when frequently and violently agitated, make indelible impressions on our features, by their repeated action on the facial muscles, insomuch that the tempers of many people may be known at first view by their looks; and as it is not improbable, that certain habits of vice may make impressions equally uniform and perhaps equally legible, if we were accustomed to study them, physiognomy appears to be worthy of rather more attention. 10. Pyromancy is a divination made by the inspection of a flame, either by observing which side it turns, or by throwing into it some combustible matter, or a bladder filled with wine, or any thing else from which they imagined they were able to predict. Natural divination was so called, because it was supposed to be not attainable by any rules or precepts of art, but imparted or inspired into the diviner, without his taking any further care about it, than to purify and prepare himself for the reception of the divine afflatus.

DIVINING ROD. We have anticipated, in the article BAGUETTE DEVINATOIRE, which see, all that we feel disposed to give credence to on this subject: but an ingenious gentleman has lately advocated the pretensions of the hazel or willow rod to be naturally, under proper management, a discoverer of metals and springs of water, at great depths; and we insert, just as they are supplied to us, his directions for choosing the rods, and observations on their properties.

I. *Directions for choosing the Rods.*—The hazel and willow rods he has, by experience, found, will actually answer with all persons in a good state of health, if they are used with moderation, and at some distance of time, and after meals, when the operator is in good spirits.

The hazel, willow, and elm, are all attracted by springs of water. Some persons have the virtue intermittently; the rod in their hands will attract one half-hour, and repel the next. The rod is attracted by all metals, coals, amber, and lime-stone, but with different degrees of strength. The best rods are those from the hazel or nut-tree, as they are pliant and tough, and cut in the winter months; a shoot that terminates, equally forked, is to be preferred, about two feet and a half long; but as such a forked rod is rarely to be met with, two single ones of similar length and size may be tied together with thread, and they will answer as well as the other.

The most convenient and handy method of holding the rod, is with the palms of the hands turned upwards, and the two ends of the rod coming outwards: the palms should be held horizontally, as nearly as possible; the part of the rod in the hand ought to be straight, and not bent backward or forward. The upper part of the arm should be kept pretty close to the sides, and the elbows resting on them; the lower part of the arm making nearly a right angle with the upper, though rather a little more acute. The rod ought to be so held, that in its working the sides may move clear of the little fingers.

The best manner of carrying the rod is with the end extended in an angle of about eighty degrees from the horizon, as by this method of carrying it, the repulsion is more plainly perceived than if it was held perpendicularly. But after all the directions that can be given, the adroit use of it can only be attained by practice and attention.

It is necessary that the grasp should be steady, for if, when the rod is going, there be the least succussion or counteraction in the hands, though ever so small, it will greatly impair, and, generally, totally prevent its activity, which is not to be done by the mere strength of the grasp; for provided this be steady, no strength can stop it.

II. *Properties observed in the Rod, and Directions for using it.*—As soon as the person's foremost foot comes near the attracting body (as far as I can observe its semi-diameter), the end of the rod is repelled towards the face; then open the hands a little, replace the rod, and approach nearer, and the repulsion will be continued until the foot is on or over the attracting body. When this is the case, the rod will first be repelled a little, viz. two or three inches, and then be attracted towards the metallic body, viz. its end will be drawn down towards it.

When it has been drawn down, it must not be thrown back without opening the hands, a fresh grasp being necessary to every attraction, but then the least opening of the hand is sufficient. As long as the person stands over the attracting body, the rod continues to be attracted; but as soon as the forefoot is beyond it, then the rod is drawn backward to the face.

Metals have different degrees of attraction; gold is strongest, next copper, then iron, silver, tin, lead, bones, coals, springs of water, and limestone.

In using the rod to discover springs and metals, let the person hold the rod as already directed, and then advancing north or south with a slow pace, just one foot before the other, at first the rod may be repelled; but as the person advances slowly, and comes over the spring or vein of ore, the rod will be strongly attracted.

A person who, by frequent practice and experience, can use the rod tolerably, may soon give the greatest sceptics sufficient satisfaction, except they are determined not to be convinced.

Some have supposed that the science called Rhabdomancy (divination by a rod), is alluded to in the following verse of Hosea:—'My people ask counsel at their stocks, and their staff declareth unto them.' ch. iv. As Europe received in very early times many superstitious customs from the east, together with many useful inventions, the conjecture is not improbable. Divination by arrows, a method of a similar kind mentioned in Ezekiel, chap. xxi., continued among the Arabs till the days of Mahomet, who, in the Koran, forbade his followers this idle attempt at prescience.

DIVIS'ION, *n. s.* / DIVIS'IBLE, *adj.* / DIVIS'IBLENESS, *n. s.* / DIVISIBIL'ITY, *n. s.* / DIVI'SOR. } Span. and Fr. *division*, from Lat. *divisio*, *à dividere*, *divisus*. See DIVIDE. The act of dividing; state of being divided; the separated part, and that which separates: hence disunion, discord, dispute; a rule of arithmetic: divisible is capable of division; divisibility, quality of admitting it. Divisor, an arithmetical term for a given number by which another is divided.

I will put a *division* between my people and thy people. *Exodus.*

Thy tongue
Makes Welsh as sweet as ditties highly penned
Sung by a fair queen in a summer's bower,
With ravishing *division*, to her lute.
Shakspeare. Henry IV.

Naturalists disagree about the origin of motion, and the indefinite *divisibleness* of matter. *Boyle.*

This will easily appear to any one, who will let his thoughts loose in the vast expansion of space, or *divisibility* of matter. *Locke.*

Express the heads of your *divisions* in as few and clear words as you can, otherwise I never can be able to retain them. *Swift.*

If we look into communities and *divisions* of men, we observe that the discreet man, not the witty, guides the conversation. *Addison's Spectator.*

The effects of human industry and skill are easily subjected to calculation: whatever can be completed in a year, is *divisible* into parts, of which each may be performed in the compass of a day. *Adventurer.*

When we frame in our minds any notion of matter, we conceive nothing else but extension and bulk, which is impenetrable, or *divisible* and passive. *Bentley's Sermons.*

In dread *divisions* marched the marshalled bands,
And swarming armies blackened all the lands.
Darwin.

DIVISIBILITY, in physics, is that property by which the particles of matter in all bodies are capable of a separation or disunion from each other. The Peripatetics and Cartesians hold divisibility to be an affection of all matter. The Epicureans, again, allow it to agree to every physical continuum; but they deny that this affection agrees to all bodies, for the primary corpuscles or atoms they maintain to be perfectly insecable and indivisible.

DIVISIBILITY OF MATTER. As it is evident that body is extended, so it is no less evident that it is divisible; for since no two particles of matter can exist in the same place, it follows, that they are really distinct from each other; which is all that is meant by being divisible. In this sense the least conceivable particle must still be divisible, since it will consist of parts which will be really distinct. To illustrate this by a familiar instance.—Let the least imaginable piece of matter be conceived lying on a smooth plain surface, it is evident the surface will not touch it every where: those parts, therefore, which it does not touch may be supposed separable from the others, and so on as far as we please; and this is all that is meant when we say that matter is *infinitely divisible*. The infinite divisibility of mathematical quantity is demonstrated geometrically. All that is supposed, however, in strict geometry, says Mr. Maclaurin, concerning the divisibility of magnitude, amounts to no more than that a given magnitude may be conceived to be divided into a number of parts equal to any given or proposed number. The number of parts, into which a given magnitude may be conceived to be divided, is not to be fixed or limited, because no given number is so great but a greater may be conceived and assigned: but there is not, therefore, any necessity of supposing the number of parts actually infinite; and if some have drawn very absurd consequences from such a supposition, yet geometry ought not to be loaded with them. How far matter may be divided, may, in some measure, be conceived from this fact, that a piece of wire gilt with so small a quantity as eight grains of gold, may be drawn out to a length of 13,000 feet, the whole surface of it still remaining covered with gold. We have also a surprising instance of the minuteness of some parts of matter from the nature of light and vision. Let a candle be lighted, and placed in an open plain, it will then be visible two miles round, and consequently were it placed two miles above the surface of the earth, it would fill with luminous particles a sphere whose diameter was four miles, and that before it had lost any sensible part of its weight. A quantity of vitriol being dissolved, and mixed with 9000 times as much water, will tinge the whole; consequently will be divided into as many parts as there are visible portions of matter in that quantity of water. With respect also to coloring substances, particularly carmine, which is a kind of powder obtained from the insect commonly called cochineal: dilute a small quantity of this powder, to the weight of about three quarters of a grain, by putting it at the bottom of a vessel, in which is afterwards poured nearly thirty pounds of water; the color will be so diffused as to be perceptible throughout the whole volume of the water. The weight of this water being 300,000 times greater than that of five centigrammes of carmine, if it be supposed that each centigramme of the fluid mixture contains only two moleculæ of the coloring principle, there will be 3,000,000 of vitriol parts in five centigrammes of carmine. Many perfumes also, without a sensible diminution of their quantity, fill a very large space with their odoriferous particles; which must therefore be of an inconceivable smallness, since there will be a sufficient number in every part of that space sensibly to affect the organ of smelling. Dr. Keill demonstrates, that any particle of matter, how small soever, and any finite space, how large soever, being given, it is possible for that small particle of matter to be diffused through

all that space, and to fill it in such a manner, as that there shall be no pore in it whose diameter shall exceed any given line. The chief objections against the divisibility of matter in infinitum are, That an infinite cannot be contained by a finite: and that it follows from a divisibility in infinitum, either that all bodies are equal, or that one infinite is greater than another. But the answer to these is easy; for the properties of a determined quantity are not to be attributed to an infinite considered in a general sense; and who has ever proved, that there could not be an infinite number of infinitely small parts in a finite quantity, or that all infinites are equal? The contrary is demonstrated by mathematicians in innumerable instances. Sir Isaac Newton is said to have derived from the system of Epicurus, the following opinion relative to the limits prescribed to the divisions of body in the actual state of things. We confess it seems to us nothing but a bold conjecture. This great philosopher conceives that the Supreme Being, in creating matter, formed it of various species of elementary molecules, solid, hard, unchangeable, the figures and the different qualities of which were appropriated to the respective ends they were proposed to answer. But such is the fixity of these molecules that no process of art, nor even any force existing in nature, can either divide or alter them, unless the essence of the body should be changed with time. Thus all the modifications experienced by bodies depend solely upon this, that these durable molecules separate the one from the other, and then become reunited in various ways forming new combinations. These different molecules are, hence, the simple substances of chemistry; and the results of the operations which they would present singly, should be the design of the efforts of this science; in the mean time we may consider as simple the substances which we have not yet been able to decompose, and wisely imagine simplicity to reside at the place where observation stops. See the article INFINITE.

DIVISION, in sea affairs, a select number of ships in a fleet or squadron of men of war, distinguished by a particular flag or pendant, and usually commanded by a general officer. A squadron is commonly ranged into three divisions, the commanding officer of which is always stationed in the centre. When a fleet consists of sixty sail of the line, that is, of ships having at least sixty cannon each, the admiral divides it into three squadrons, each of which has its divisions and commanding officers. Each squadron has its proper colors, according to the rank of the admiral, and every division its proper mast. Thus in Britain, the first admiral, or the admiral of the fleet, displays the union flag at the main-top-mast head; next follows the white flag with St. George's cross; and afterwards the blue. The private ships carry pendants of the same color with their respective squadrons at the mast of their particular divisions; so that the last ship in the division of the blue squadron carries a blue pendant at her mizen-top-mast head.

DIVISIONS OF AN ARMY, in the military art, the several brigades and squadrons into which it is cantoned.

DIVISIONS OF A BATTALION are the several platoons into which it is divided in marching or firing, each of which is commanded by an officer.

DIUM, in ancient geography, the name of a town of Macedonia, in Pieria, on the west side of the Sinus Thermaicus. Strabo and Livy place it on the borders of Pieria to the south, at the foot of mount Olympus towards Thessaly. That it was a splendid city, appears from Polybius; who relates, that its gymnasium and walls were overthrown by the Ætolians. From which overthrow, however, it again recovered, Alexander adding new splendor to it, by the brass statues cast by Lysippus and erected there in memory of those slain at the Granicus: an ornament which was continued down to the time of the Romans; who made it a colony, called Diensis.

DIVODORUM, in ancient geography, a town of the Mediomatrici in Gallia Belgica; situated on the Moselle, in the spot where Metz now stands. See METZ.

DIVORCE', *v. a.* & *n. s.* } Fr. *divorcer*; It. *di-*
DIVORCE'MENT, *n. s.* } *vorzare*; from Barb.
DIVOR'CER. } Lat. *divortere*; *dis* and *vertere*, *à marito*, to turn, from her husband. The legal separation of a husband and wife, the verb being derived from the noun: hence disunion, or separation generally; and separation by authority or force. Divorcement seems synonymous with the substantive; and a divorcer is, he who causes or procures a divorce.

Write her a bill of *divorcement*, and give it in her hand, and send her out of his house. *Deut.* xxiv. 1.

If so be it were possible, that all other ornaments of mind might be had in their full perfection, nevertheless the mind that should possess them, *divorced* from piety, could be but a spectacle of commiseration. *Hooker.*

To restore the king,
He counsels a *divorce*, a loss of her,
That like a jewel has hung twenty years
About his neck, yet never lost her lustre.
Shakspeare. Henry VIII.

Go with me, like good angels, to my end;
And, as the long *divorce* of steel falls on me,
Make of your prayers one sweet sacrifice,
And lift my soul to heaven. *Id.*

The continent and the island were continued together within men's remembrance by a drawbridge; but are now *divorced* by the downfallen cliffs.
Carew's Survey of Cornwall.

Such motions may occasion a farther alienation of mind, and *divorce* of affections, in her, from my religion. *King Charles.*

So seemed her youthful soul not easily forced,
Or from so fair, so sweet a seat *divorced*. *Waller.*

Divorce is a lawful separation of husband and wife, made before a competent judge, on due cognizance had of the cause, and sufficient proof made thereof.
Ayliffe's Parergon.

Death is the violent estranger of acquaintance, the eternal *divorcer* of marriage.
Drummond's Cyprian Grove.

Aerial pasture the lungs with gentle force
Constant embrace by turns, by turns *divorce*.
Blackmore.

DIVORCE. This is a topic connected with many moral and legal considerations; and those of sufficient importance, we apprehend, to justify

our entering upon it at some length. Scarcely has the country survived the moral effects of a recent discussion of it in the highest quarters, and in the inner sanctuary of British justice. It will be sufficient to remark, with regard to that unhappy circumstance, that both the learned professions appeared in a state of even unusual obscurity and doubt upon the subject. Lawyers, unquestionably well versed in the institutions of their country, were as singularly divided with regard to the fair effect of some of our statutes and usages respecting divorce, as the learned prelates were disagreed among themselves respecting what was really the law of God.

The writer of this paper has had occasion to pay considerable attention to this subject, both in a moral and legal point of view. He has seen the laws of his country to be in a remarkable state of confusion respecting it; he is convinced that their ordinary course, with regard to divorces, is opposed to the simple provisions of the law of Jesus Christ. He would therefore offer to the reader a brief statement of the actual laws and practices of this country on the subject, with a view to the examination of their moral effect and propriety; then compare them with the provisions and usages of antiquity generally: and finally, with the express injunctions of Holy Writ.

1. There are many kinds of divorce, say the law authorities mentioned in our books; as causâ pracontractûs; causâ frigiditatis; causâ consanguinitatis; causâ affinitatis; causâ professionis, &c. But the usual divorces are of two kinds, i. e. à mensa et thoro, from bed and board; and à vinculo matrimonii, from the very bond of marriage. A divorce à mensa et thoro does not dissolve the marriage; for the cause of it is subsequent to the marriage, and supposes the marriage to be lawful: this divorce may be by reason of adultery in either of the parties, for cruelty of the husband, &c. And as it does not dissolve the marriage, so it does not debar the woman of her dower, or bastardise the issue, or make void any estate for the life of husband and wife, &c. Co. Lit. 235; 3 Inst. 89; 7 Rep. 43. The woman under separation by this divorce must sue by her next friend; and in her own name she may sue her husband for alimony.

A divorce à vinculo matrimonii, absolutely dissolves the marriage, and makes it void from the beginning, the causes of it being *precedent* to the marriage; as præcontract with some other person, consanguinity or affinity, within the Levitical degrees, impotency, impuberty, &c. On this divorce dower is gone; and if, by reason of præcontract, consanguinity, or affinity, the children of the marriage are bastards. But in these divorces, the wife, it is said, shall receive all again that she brought with her, because the nullity of the marriage arises through some impediment; and the goods of the wife were given for her advancement in marriage, which now ceases: but this is where the goods are not spent; and if the husband give them away during the coverture, without any collusion, it shall bind her: if she knows her goods unspent, she may bring action of detinue for them; and as for money, &c., which cannot be known, she must sue in the spiritual court. This divorce enables the parties to marry again.

In regard to the former case, it is the practice in the higher walks of life to apply to parliament to complete the divorce by an ex post facto law, when, if the divorce is grounded, as it almost invariably is, on adultery, it is necessary that a clause be inserted in the proposed bill, interdicting the offending parties from intermarrying. Evidence must be given, on the bill, that an action for damages has been brought against the seducer, and judgment for the plaintiff had thereon, or a sufficient reason given why such action was not brought, or judgment obtained. Upon the second reading of the bill in the house of lords (where, indeed, it usually originates), it is necessary that an official copy of the proceedings, and definitive sentence of divorce à mensa et thoro, in the ecclesiastical court, at the suit of the petitioner, be delivered at the bar on oath; and that the petitioner attend the house to be examined, if the house think fit, whether there be any collusion respecting the act of adultery, or the divorce, or any action for criminal conversation; and whether the wife was living apart from her husband under articles of separation.

If after a divorce à mensa et thoro, either of the parties marry again, the other being living, such marriage is a mere nullity; and by sentence to confirm the first contract, she and her first husband become husband and wife to all intents, without any formal divorce from the second. Also on this divorce, as the marriage continues, marrying again while either party is living, hath been held to be bigamy within the stat. 1 Jac. c. 11.

A divorce for adultery was anciently à vinculo matrimonii; and therefore in the beginning of the reign of queen Elizabeth the opinion of the church of England was, that after a divorce for adultery, the parties might marry again; but in Foliambe's case, H. 44 El. in the star-chamber, that opinion was changed; and archbishop Bancroft, by the advice of divines, held, that adultery was only a cause of divorce à mensa et thoro. Sentence of divorce must be given in the life of the parties, and not afterwards: but it may be repealed in the spiritual court, after the death of the parties.

It should be added that divorce is, according to our law, a judgment spiritual; hence it must be sued for and pronounced in the spiritual court, where also, 'says Coke upon Littleton,' if there be occasion, it ought to be reversed: and that the canon law, by which these courts are regulated, is followed by the common law, in considering the nuptial tie so strong as not to be capable of being *unloosed* for any cause whatever. Our law, in fact, refers throughout to the Romish notion of the sacrament of marriage, and its utter indissolubility. Such, without entering into minute provisions, is the law and practice of our enlightened country on this important subject.

2. Divorce was allowed in much greater freedom in all the celebrated nations of antiquity. At Rome, barrenness, age, disease, madness, and banishment, were the ordinary causes of divorce. Spurius Carvilius, between 500 and 600 years

after the building of Rome, under the consulship of M. Attilius and P. Valerius, was the first who put away his wife because she was barren; though Plutarch, in his Roman questions, maintains that Domitian was the first who permitted divorce. Justinian afterwards added impotence, a vow of chastity, and the profession of a monastic life, as valid reasons of divorce. The Roman lawyers distinguish between repudium and divortium; making the former to be the breaking of a contract or espousal, and the latter separation after matrimony. Romulus enacted a severe law, which suffered not a wife to leave her husband, but gave the man the liberty of turning off his wife, for adultery, for poisoning her children, or counterfeiting his private keys. However, in later times, the women as well as the men might sue for a divorce. The common way of divorcing was by sending a bill to the woman, containing the reasons of separation, and a tender of all her goods which she brought with her; and this was called repudium mittere; or else it was performed in her presence, and before seven witnesses, and accompanied with the formalities of tearing the writings, refunding the portion, taking away the keys, and turning the woman out of doors.

The Grecian Laws concerning divorces were different: the Cretans allowed divorce to any man who was afraid of having too many children. The Spartans seldom divorced their wives; and held it extremely scandalous for a woman to depart from her husband. The Athenians allowed divorce on very small grounds, by a bill containing the reason of the divorce, and approved, if the party appealed, by the chief magistrate; and women also were allowed to leave their husbands on just occasions. Persons divorcing their wives were obliged to return their portions; otherwise the Athenian laws obliged them to pay nine oboli a month for alimony. The terms expressing the separation of men and women from each other were different; the men were said *αποπεμπειν* or *απολυειν*, to dismiss their wives; but wives, *απολειπειν*, to leave their husbands.

According to Ricaut (State, Ottom. Emp. ch. xxi.) there are among the Turks three degrees of divorce. The first only separates the man and wife from the same house and bed, the maintenance of the wife being still continued: the second not only divides them in that manner, but the husband is compelled to make good her 'kabin,' which is a jointure or dowry promised at her marriage, so as to have no interest in him or his estate, and to remain in a free condition to marry another. The third sort of divorce, which is called 'Ouch Talae,' is made in a solemn and more serious manner, with more rigorous terms of separation; and in this case the husband, repenting of his divorce, and desirous of retaking his wife, cannot by the law be admitted to her without first consenting to, and contenting himself with, her being temporarily possessed by another man; which the law requires as a punishment of the husband's lightness and inconstancy. These usages seem to have grown out of the laws of Mahomet, who, in the second chapter of the Koran, has ordered that if a man divorce his wife the third time (for he may divorce her twice without being obliged to part with her) if he repent of what he has done, it shall not be lawful for him to take her again, until she has been first married and bedded by another, and divorced by such second husband. (Koran, ch. ii. p. 27). The precaution, on the whole, has had so good an effect, that the Mahommedans are seldom known to proceed to the extremity of divorce, notwithstanding the liberty given them; it being reckoned a great disgrace so to do: and there are few, except those who have little or no sense of honor, that will take a wife again on the condition enjoined. (Seld. ubi. Sup. l. iii. c. 21; Ricaut's Ottom. Emp. b. ii. c. 21). It must be observed, also, that though a man is allowed, by the Mahommedan law, to repudiate his wife, even on the slightest disgust, yet the women are not allowed to separate themselves from their husbands, unless it be for ill usage, want of proper maintenance, neglect of conjugal duty, impotency, or some cause of equal import; but then she generally loses her dowry, which she does not lose if divorced by her husband, unless she has been guilty of impudicity or notorious disobedience. (Koran, ch. iv. p. 62). When a woman is divorced she is obliged, by the direction of the Koran, to wait three months before she marry another; after which time, in case she be not found with child, she is at full liberty to dispose of herself as she pleases; but if she prove with child she must wait till she be delivered: and, during her whole term of waiting, she may continue in her husband's house, and is to be maintained at his expense; it being forbidden to turn a woman out before the expiration of the term, unless she be guilty of dishonesty. (Koran, ch. ii. p. 26, 27; ch. lxv. p. 454). Where a man divorces a woman before consummation, she is not obliged to wait any particular time (Koran, ch. xxxiii. p. 348); nor is he obliged to give her more than one-half of her dower. (Koran, ch. ii. p. 28). If the divorced woman have a young child, she is to suckle it till it be two years old; the father, in the mean time, maintaining her in all respects: a widow is also obliged to do the same, and to wait four months and ten days before she marry again. (Koran, ch. ii. p. 27).

The divine law to the Jews on this subject is to this effect (Deut. xxiv. 1, &c.): 'When a man hath taken a wife, and married her, and it come to pass that she finds no favor in his eyes, because he has found in her some uncleanness; then let him write her a bill of divorcement, and give it into her hand, and send her out of his house. And when she is departed, she may go, and be another man's wife; and if her second husband hate her, and write her a bill of divorce, or if he chance to die, her former husband shall not take her again to be his wife, after she is defiled, for that is an abomination to the Lord.' A question has occurred respecting the interpretation of this law, What is meant by the words, 'if he find any uncleanness, turpitude, or nakedness in her?' and the critics are divided in opinion about it. Dr. Geddes has rendered the Hebrew words, ערות דבר, 'some defect,' but they are by Montanus rendered nuditatem verbi —by our translators, 'something unclean.' Sept.

ασχημον πραγμα. Vulg. aliquam fœditatem, and so equivalently Onk. Syr. and both Arabs. But Tharg. פתנם עבירת, 'some transgression;' and this transgression is supposed by Rabbi Sammai and his followers to be adultery. R. Hillel and his party extend the ערות דבר to *whatever may displease the husband;* and such appears to have been the loose construction of this law in our Saviour's time. The opinion of the Sammaites is untenable; for adultery was punished with death; while that of the Hillelites appears to be too lax. It was probably either some very great bodily blemish, or some base immoral habit, that was meant by the legislator. The form of the bill of divorce was to this effect: 'Such a day, month, or year, I, such an one, of such a place, upon, or, near such a river, do, of my own free consent and choice, repudiate thee, such an one, my late wife, banish thee from me, and restore thee to thy own liberty; and thou mayest henceforth go whither, and marry whom thou wilt: and this is thy bill of divorcement, and writing of expulsion, according to the law of Moses and Israel.' This writing was signed by two witnesses, and delivered in the presence of as many, at least. From this time, the wife was as much at her liberty, as if she had been a widow; only, in both cases, she was obliged to stay at least ninety days, before she was married to another, lest she should prove pregnant by the last. It does not appear that women were indulged by the law of Moses with the privilege of divorcing their husbands upon the same ground; unless in the case of a virgin betrothed by her parents before she was twelve years of age, who might then refuse to ratify the contract which her parents had made, without giving any other reason than that she did not like the person designed for her; but this cannot be called a divorcement, because there is no marriage in the case. Josephus, therefore, thinks (Ant. lib. xv. c. 11; xviii. 7; xx. 15), that a divorce was so far from being permitted to women, that, if the husband forsook his wife, it was not lawful for her to marry another, till she had first obtained a divorce from him. He adds, that Salome, sister of Herod the Great, was the first who took upon her to repudiate her husband, whose example was soon followed by others, mentioned by the same author.

3. Let us now regard the subject more particularly in its various relations to society, and as a topic of legislation with the great Christian lawgiver.

Divorce is always an evil. The sufferings of the innocent, the regrets of the wise and virtuous, and the abhorrence of God, attend upon it; while it opens a breach in the foundations of human society to which no other domestic evil is comparable. That it may be the refuge of a good man from the vices of an incorrigible companion, and the prospect of indefinite future injuries, who can deny? but never can it be his remedy for the past; never will it offer any thing to his mind in the shape of compensation. It is of that species of punishment on the guilty, of which the innocent is compelled to share the shame and the suffering, in a peculiar manner; and to bear, perhaps, in this life the chief miseries. The feelings of the mind that preserve that innocence, the very affections that prompt and support him in the path of duty, prepare for him present sufferings, against which the criminal party must be hardened; and to the same remote generations, that hear the tale of delinquency on the one side, the humiliation, and, generally, the groundless blame of the other, will be faithfully conveyed.

As far as the immediate parties to a divorce are concerned, all the objects and uses of marriage are ruinously overthrown and defeated by it. The husband (following the supposition of his being the innocent party), can no longer—never more, perhaps, can he—regard the character of woman in its true light. No longer has she power to infuse a peculiar sensibility into his heart, to give candor and patience to his mind, or sweetness to his disposition. All his recollections of her influence are calculated to inspire just the opposite feelings. 'More bitter than death,' have been the consequences of his submission to it. And when the husband is the guilty, and the wife the innocent party (for the only just cause of divorce will compel the Christian moralist to hold the balance even between the sexes), what must the widowed heart of an all-confiding female endure? It is hardly possible that she should ever more look up to man; that she should again believe that his judgment can strengthen hers, or his character become a safe pillar of her hope.

The mischiefs of divorce are but too often capable of a still greater aggravation, i. e. when children are connected with its consequences. For a father's authority (in our boyish days particularly) it is as impossible to find a substitute, as for a mother's care in earlier life. Let not parents forget, that no hireling, however faithful or respectable, can do their duty to their children—a duty ever, as a whole, intransferable, 'because he is a hireling;' but divorces generally break into a family when all that is most important in the character of each parent should be in full exercise; when, if there are children, they are of tender years, and every thing in relation to their character and hopes is in the bud, or in blossom. Now, either 'father,' or 'mother (names especially in conjunction, of greater moral power than any other that belong to creatures), becomes a term worse than unmeaning, worse than dead. As soon as the mind can be influenced by the fatal example, it is weakened on the side of virtue, and influenced to evil by one or other of these endearing and important names; which it connects for life with the ideas of tyranny, and cruelty, and profligacy—or with those of treachery, and folly, and female shamelessness. Nor is this all; though one of the less direct, it is not one of the least blessings of marriage to society, that it frequently draws together numerous collateral parties into kindred, and, like a single branch of an inland navigation, unites the resources and blends the interests of distant neighbourhoods. Imagine this one branch to be obstructed or annihilated, and the effect is felt wherever its waters flow. Something like this, or worse than this, occurs in every case of

divorce, however just. Amongst all the parties connected by affinity with the original tie, the annihilation of it distils evil. Where only ordinary good wishes were increased by it, and approving aunts and smiling cousins felt it but decent to remember the relationship when it did not infringe on their selfishness, or on prior claims, the warmest discussion of the facts and circumstances, the merits and demerits of the case, will spread; and wounded pride will be far more productive of hatred and of falsehoods, than any such ties ordinarily are of affection. Every divorce is thus a party affair with a number of families and individuals, an evil unseen, but increasing with the increasing intelligence of the community—and proportionably destroying the safeguards of virtue amongst them, by familiarising them with the details of the worst of crimes.

It is rather remarkable that we have a most elaborate disquisition on this subject from the pen of Milton. As his prose writings generally, and his theological sentiments in particular, have recently attracted considerable public notice, we may be allowed to notice his views of divorce somewhat in detail. He had made what he would call 'a disastrous and misyoked marriage,' 'a remediless mistake;' in which it were 'as vain to go about to compel' the unhappy pair 'into one flesh, as to weave a garment of sand, to compel the vegetable and nutritive powers of nature to assimilations and mixtures which are not alterable each by the other; or force the concoctive stomach to turn that into flesh, which is so totally unlike that substance as not to be wrought upon.' In other words, the prince of poets had proved himself but man in his choice of a wife; and because she was not more than woman in bearing with his learned peculiarities at home, and not a well advised or discreet woman, in refusing to return home after a short absence at her father's house, Milton branded her as 'no wife,' 'an adversary,' 'a desertrice; and actually paid his addresses to another lady with a view to supplying her place. The sequel of the poet's history speaks of a romantic reconciliation taking place between them She rushed to his feet in tears at the house of a relative; and, after a short reluctance, he sacrificed his resentment to her entreaties, and the solicitation of surrounding friends. To this event, according to Fenton, we owe much of the painting in 'that pathetic scene in Paradise Lost, in which Eve addresses herself to Adam for pardon and peace. Now then, the 'mistake' was remedied; the uncongenial 'assimilations' mixed; and the champion of divorce and his 'adversary' became 'one flesh:' but he had published, in the interim, his work on Divorce, and others in defence of it; and he through life justified the theory he had, under these untoward circumstances, espoused. Milton composed two sonnets on the treatment he received from the public, and particularly from the clergy, on account of these works. In one he says:—

A book was writ of late, called Tetrachordon
And woven close, both matter, form, and style;
The subject new: it walked the town awhile,
Numbering good intellects; now seldom pored on.
Cries the stall-reader, 'Bless us! what a word on
A title-page is this!' And some in file
Stand spelling false, while one might walk to Mile-End-Green.——

In the other he is more serious:—

I did but prompt the age to quit their clogs
By the known rules of ancient liberty,
When straight a barbarous noise environs me
Of owls and cuckoos, asses, apes, and dogs:
As when those hinds that were transformed to frogs,
Railed at Latona's twin-born progeny,
Which after held the sun and moon in fee.
But this is got by casting pearls to hogs,
That bawl for freedom in their senseless mood,
And still revolt when truth would set them free.

A definition of marriage, which the poet furnishes in due form and order, certainly lies at the basis of the 'Doctrine of Divorce.'

'The material cause of matrimony,' says Milton, 'is man and woman; the author and efficient, God and their consent. The internal form and soul of this relation is conjugal love, arising from a mutual fitness to the final causes of wedlock,—help, and society in religious, civil, and domestic conversation, which includes, as an inferior end, the fulfilling of natural desire and specifical increase; these are the final causes, both moving the efficient and perfecting the form.' p. 272.

Or again, and with all the eloquence of a disappointed lover:—

'Marriage is a divine institution, joining man and woman in a love fitly disposed to the helps and comforts of domestic life. A divine institution. This contains the prime efficient cause of marriage: 'Joining man and woman in a love, &c. This brings in the parties' consent, until which be, the marriage hath no true being. When I say 'consent,' I mean not error: for error is not properly consent; and why should not consent be here understood with equity and good to either part, as in all other friendly covenants—and not be strained and cruelly urged to the mischief and destruction of both! Neither do I mean that singular act of consent which made the contract; for that may remain, and yet the marriage not true nor lawful; and that may cease, and yet the marriage both true and lawful, to their sin that break it. So that either as no efficient at all, or but a transitory, it comes not into the definition. That consent I mean which is a love fitly disposed to mutual help and comfort of life; this is that happy form of marriage, naturally arising from the very heart of divine institution in the text, in all the former definitions either obscurely, and under mistaken terms expressed, or not at all. This gives marriage all her due, all her benefits, all her being, all her distinct and proper being. This makes a marriage not a bondage—a blessing not a curse—a gift of God not a snare. Unless there be a love, and that love born of fitness, how can it last? Unless it last, how can the best and sweetest purposes of marriage be attained? And they not attained, which are the chief ends, and with a lawful love constitute the formal cause itself of marriage, how can the essence thereof subsist? How can it be,

indeed, what it goes for? Conclude, therefore, by all the power of reason, that where this essence of marriage is not, there can be no true marriage; and the parties, either one of them or both, are free, and without fault, rather by a nullity than by a divorce, may betake them to a second choice, if their present condition be not tolerable to them. If any shall ask, why 'domestic' in the definition? I answer, that because both in the Scriptures, and in the gravest poets and philosophers, I find the properties and excellencies of a wife set out only from domestic virtues; if they extend further, it diffuses them into the motion of some more common duty than matrimonial.' pp 276, 7.

We have but one objection to both these definitions. They envelope in a cloud of words the chief design of marriage; or rather they wholly mis-state its chief design to be the personal comfort of the immediate parties. 'Help and society in religious, civil, and domestic conversation;' 'a love fitly disposed to the help and comfort [of each other] in domestic life.' The relative bearing of the institution, or its aspect towards society at large, is almost wholly overlooked. Now we are not about to tempt an unequal warfare with the able quills, or still more formidable frowns, of our fair countrywomen, by denying for one moment the reality of the 'only want' of our primitive sire; or disputing the superior personal comforts he enjoyed, after the formation of his bride. But even a Milton must not be allowed to stigmatise, in prose, the dearest hope of the marriage state, the possession of children, as 'an inferior end' of marriage. We contrast such a sentiment with the nobler views of the author of Paradise Lost, and smile at the versatility of our nature:—

> Hail wedded love, mysterious law, true source
> Of human offspring, sole propriety
> In Paradise, of all things common else!
> By thee adulterous lust was driven from men
> Among the bestial herds to range; by thee,
> Founded in reason, loyal, just, and pure,
> Relations dear, and all the charities
> Of father, son, and brother, first were known.

The Roman moralist (Cicero) understood the matter better than either of these definitions state it: or rather, unbiassed by his private grievances in respect to marriage (for he too had them, it will be remembered), he expressed its great objects far more correctly, when he called it 'The beginning of a city, the seminary of the commonwealth.' In fact, if either the Mosaic narrative of the original institution, or the positive declaration of the almighty Author, is to be held decisive on the subject, the relative objects of marriage, as a 'source of human offspring,' and a natural guarantee of their education, far from being subordinate to any other, constituted his principal design in it. Every other part of creation is represented by the sacred historian as containing, at its birth, some provision for its perpetuity. Light is divided into successive days; the gramineous tribes are secured against destruction in the seed which they yield, and the fruits in that which they contain; all the inferior creatures of the deep, the earth, and the air, are created 'after their kind:' and God saw this arrangement, in particular, to be טוֹב 'good,' perfect, complete. The male of the human species only was, at first, produced 'alone;' perhaps to teach man more distinctly some of the lessons we are about to consider. This was 'not good,' not a perfect arrangement with regard to man; it did not provide for the complete development of the divine plans concerning him. Marriage was accordingly instituted; and the nuptial benediction pronounced in these terms: 'Be fruitful, and multiply, and replenish the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.' Jehovah formed for man 'a companion, a covenanted wife.' 'Did he not make (two) one flesh? And is there not one spirit thereto? And what doth he seek? A godly seed.' Abp. Newcome's version of Mal. ii. 15. The endearing names of husband and wife are subordinated by revelation to the important duties of parents. It is truly surprising to see so accurate a textuary, so good a moralist, and so profound a divine, as Milton unquestionably was, bringing together a ponderous volume on marriage and divorce, in which this consideration does not occupy the extent of one page.

The parties then, as we contend, who are in the first instance capable of forming a good and binding marriage, are incapable afterwards of dissolving the contract. The will that binds becomes bound by its own act, and the tie can neither be less strong nor less reasonable on that account. Too common is the notion of measuring the obligation of this, the most important of our voluntary engagements, by the same sort of capricious feeling in which it often originates. With regard, indeed, to the particular person we marry, we are and may justifiably be directed by our own inclinations and preference; but if hence it is assumed, that inclination rather than duty may be a safe future rule, a decent recollection of the ends of marriage will show the fallacy of the conclusion; while to the Christian, who sincerely feels that 'the way of man is not in himself,' it will appear perfectly monstrous. Various are the contracts that bring us into such new relations to others, that, after having once voluntarily engaged in them, no power of withdrawment is reserved to us. The formal promises and promissory undertakings of the merchant, most of the actual engagements of the learned professions, the acceptance of political office and military rank, but all marriages pre-eminently, are contracts of this description. They bring us into a new moral state; we disengage ourselves from one class of duties, and undertake another; and our good or evil conduct supports the good or evil, promotes the prosperity or adversity, of all men of our class. If we would retreat, we cannot replace numerous other interested parties, nor can we be ourselves replaced in our respective situations before contracting. Amongst these other interested parties to marriage, the appointment of God and nature places prominently—children. Their being is to be considered as a matter of course, and the promotion of their moral well-being as a matter of duty, attendant upon every marriage;—a seed,

and 'a godly seed.' The cases in which this relation may be lawfully entered into, without any view to the obtaining a family, are to be regarded as exceptions to the general purposes of the institution; they are clearly out of analogy with what we have seen to be its chief design.

We would press particularly on the consideration of the moral reader, married or unmarried, the divinely established connexion between marriage and education. Men and women are united, when God is duly acknowledged to join them together, for objects worthy their own future destiny. A new tribe of creatures, wearing the image of our Almighty Maker, is designed to spring from the union—creatures whose duties, and whose happiness, whose temporal, and whose everlasting destiny, will be more materially affected by the conduct of their parents, as such, than by that of any other human beings. These are the parties, for the sake of whom Christianity has banished polygamy, and restrained divorce; for the sake of whom, even the course of nature seems to dictate the expediency of pairing, and the permanency of the marriage tie, all animals, whose care is necessary for the rearing of their young, having a similar instinct; and none discarding them while their parental care is important:—but what animal has eternal destinies connected with that care, except man? In an age greatly distinguished for the promotion of education by substitute, we have never seen these considerations sufficiently insisted upon in print. Let us educate by substitute, we say, and let any adequate moral superintendence be introduced, when there are no means (from whatever cause) of bringing the parent to watch over and control the machinery of education. But where this can be done, let it be done. It ought to be done. It is the Divine appointment that it should be done; and in those classes of society that have so laudably stood forward for the benefit of others, it is ever practicable—it should ever be borne in view.

Our poet's 'Doctrine of Divorce,' proportionably defective with his definition of marriage, would place the most important of our voluntary contracts on the weakest of all possible grounds. With him, the peculiar temperament of mind and character which first determines us to marry a particular person may, if afterwards reversed, reverse and annul the bond. 'Indisposition, unfitness, or contrariety of mind!' It would be irreverence to the memory of this great man, to multiply quotations from his mode of reasoning on the subject.

Milton defends his doctrine by contending that the law of Moses on this subject is not, in point of fact, repealed by Jesus Christ; and that as other reasons of divorce than actual adultery were allowed by the Jewish legislator, the Christian magistrate should yet admit of them. He minutely examines the celebrated text, Deut. xxiv. 1; and compares it with the original institution of marriage; insisting that no covenant whatever obliges against the main end of itself and the parties covenanting, which main end he calls, in marriage, the 'remedy of loneliness' in man. He then objects to the ignorance and iniquity, as he terms it, of the 'canon law, providing for the right of the body in marriage, but nothing for the wrongs and grievances of the mind.' He contends, that the ordinary construction of Matt. v. 32, as repealing the Mosaic law, in reality charges that law with conniving at open and common adultery among the chosen people of God. Nine reasons are given (chap. ii. to xiii.) for the Mosaic precept, thus assumed to be still in force. 1. A meet and proper conversation is the chiefest end of marriage. 2. Without this law, marriage, as it happens oft, is not a remedy of that [kind] which it promises [to be]. 3. Without it, he who finds nothing but remediless offences and discontents, is in greater temptations than ever before. 4. God regards love and peace in the family more than a compulsive performance. 5. Nothing more hinders and disturbs the whole life of a Christian, than a matrimony found to be incurably unfit. 6. To prohibit divorce sought for natural causes is against nature. 7. Sometimes the continuance in marriage may be evidently the shortening or endangering of life. 8. It is probable, or rather certain, that every one who happens to marry hath not the calling. 9. Marriage is not a mere carnal coition, but a human society. Such are the contents of book I. of the Doctrine and Discipline of Divorce.

He examines, in his second book, the Christian doctrine on the subject. Christ, it is insisted, neither 'did nor could' abrogate the law of divorce, but only reproved the abuse thereof. He afterwards combats the common exposition of divorce being permitted to the Jews, 'because of the hardness of their hearts,' and insists, that the law cannot permit, much less enact a permission of, sin; that to allow sin by law is against the nature of law; that if divorce be no command, neither is marriage; and that divorce could be no dispensation, if it were sinful.

He further objects, that if a dispensation of the real law of marriage be supposed, Christians need it as much as the Jews did, and that the gospel is apter to dispense than the law. In defining (chap. viii.) the true sense in which Moses suffered divorce for hardness of heart, he says:—

'Moses, Deut. xxiv. 1. established a grave and prudent law, full of moral equity, full of due consideration towards nature, that cannot be resisted, a law consenting with the laws of wisest men and civilest nations; that when a man hath married a wife, if it come to pass that he cannot love her, by reason of some displeasing natural quality or unfitness in her, let him write her a bill of divorce. The intent of which law undoubtedly was this, that if any good and peaceable man should discover some helpless disagreement or dislike, either of mind or body, whereby he could not cheerfully perform the duty of a husband, without the perpetual dissembling of offence and disturbance to his spirit; rather than to live uncomfortably and unhappily, both to himself and to his wife; rather than to continue undertaking a duty, which he could not possibly discharge, he might dismiss her whom he could not tolerably, and so not conscionably, retain. And this law, the spirit of God by the mouth of

Solomon, Prov. xxx. 21, 23, testifies to be a good and a necessary law, by granting it that 'a hated woman' (for so the Hebrew word signifies rather than 'odious,' though it come all to one) that 'a hated woman when she is married, is a thing that the earth cannot bear.' What follows then, but that the charitable law must remedy what nature cannot undergo?' pp. 99, 100.

The opening of chap. ix. of this book is, perhaps, the most remarkable part of his whole reasoning. It shows indeed the difficulty of making the worse appear the better cause, in this instance. We recollect no equal display of dignified quibbling:—

'And to entertain a little their overweening arrogance,' he is speaking of our Lord's reply to the Pharisees on this subject, Mark x., 'as best befitted, and to amaze them yet further, because they thought it no hard matter to fulfil the law, he draws them up to that unseparable institution, which God ordained in the beginning before the fall, when man and woman were both perfect, and could have no cause to separate: just as, in the same chapter, he stands not to contend with the arrogant young man, who boasted his observance of the whole law, whether he had indeed kept it or not, but screws him up higher to a task of that perfection, which no man is bound to imitate. And in like manner, that pattern of the first institution he set before the opinionative Pharisees, to dazzle them, and not to bind us. For this is a solid rule, that every command, given with a reason, binds our obedience no otherwise than that reason holds. Of this sort was that command in Eden, 'Therefore shall a man cleave to his wife, and they shall be one flesh;' which we see is no absolute command, but with an inference, 'therefore:' the reason then must first be considered, that our obedience be not misobedience. The first is, for it is not single, because the wife is to the husband 'flesh of his flesh,' as in the verse going before. But this reason cannot be sufficient of itself; for why then should he for his wife leave his father and mother, with whom he is far more 'flesh of flesh, and bone of bone,' as being made of their substance? And besides, it can be but a sorry and ignoble society of life, whose inseparable injunction depends merely upon flesh and bones. Therefore we must look higher, since Christ himself recalls us to the beginning; and we shall find that the primitive reason of never divorcing, was that sacred and not vain promise of God to remedy man's loneliness, by 'making him a meet help for him,' though not now in perfection, as at first, yet still in proportion as things now are.—To make a meet help is the only cause,' he goes on to assert, 'that gives authority to this command of not divorcing to be a command. And it might be further added, that if the true definition of a wife were asked at good earnest, this clause of being 'a meet help' would show itself so necessary and so essential, in that demonstrative argument, that it might be logically concluded; therefore she who naturally and perpetually is no 'meet help' can be no wife; which clearly takes away the difficulty of dismissing such a one.' p. 102—104.

According to the same lax mode of interpretation, 'whom God hath joined together,' only describes a married pair, 'when their minds are fitly disposed and enabled to maintain a cheerful conversation to the solace and love of each other;' p. 127, and the term 'fornication,' in the exceptive clause of Matt. v. 32, &c., will include 'such things as give open suspicion of adulterising, as the wilful haunting of feasts, and invitations with men not of her near kindred, the lying forth of her house, without probable cause, the *frequenting of theatres against her husband's mind.*' p. 136.

We are not acquainted with the writings of any modern advocate of these notions who is also a believer in Christianity. The great name of Milton, however, will ever confer a degree of interest on his sentiments generally; while we with pleasure reflect, how little it weighs, in England, in point of *authority* on the subject of divorce:—a proof of the predominance of sound moral feeling on that topic in this country. Let us retain our English household virtues, and the springs of virtuous life and life eternal will be still untouched. But modern infidelity, with its characteristic indifference to all our real good, has spun similar theories to those of Milton on the subject of marriage, even in this land of Bibles; and we cannot forget that the political reign of that abortion of the human mind in France was distinguished for its numerous and most profligate divorces. Infidelity has recently reared its head amongst us; and is ever likely to reason and act in this way. The idea of marriage, and all its engagements, being mere matters of private right and private feeling, rather than of express and irrepealable law between God and man, is perhaps natural to us; but it is not a Christian sentiment: and because all classes of society are warmly interested in reprobating it, we shall venture a little deeper into the topics of marriage and divorce.

We are advocates for adverting at once to revelation, upon every subject on which it professedly treats; and few are the moral duties that are more copiously, or more definitely, exhibited in Scripture, than those of the marriage state. Few are the needful remedies for worse evil, that, in our judgment, are more clearly prescribed in Scripture, than the unhappy one of divorce. The divine Saviour, in referring to the original institution of marriage, calls his heavenly Father, as Chrysostom long ago remarked, 'the Maker of all holy matches.' He professes to republish the primitive law of the institution; he defines it as embracing only two persons, 'They twain shall be one flesh;' he restores the woman to her station of equality, as to the nature and duration of the tie; while he shows that it binds equally both parties from all others, and through the whole of life. The apostolical epistles dwell upon its purposes, honors, and duties. The earliest and most distinguished of the Christian teachers had 'commandments' from 'the Lord' on the topic (1 Cor. vii. 10, 11), which he distinguishes from his own warmest recommendations. He endeavours to illustrate the most profound Christian doctrines by a figurative use of the institution and its duties; which he presses, in detail, as

amongst the most important parts of Christian practice.

As a system of morals Christianity must be held to be decidedly friendly to marriage. It attributes expressly all the most abominable vices of the heathen world to 'forsaking' its wholesome provisions, while, externally, it exhibits some of its most beneficial influences in society, in the changes it has produced in the condition of women, wherever it has spread. Unhallowed affections fly before it. They are not merely represented as impolitic, inconvenient, and ruinous, in their temporal consequences, which they are; but plainly declared to exclude men from the kingdom of God, 1 Cor. vi. 9, Gal. v. 19, Heb. xiii. 4. Other systems of religion transfer the impurities of human passion and lust to another world—Christianity brings down heavenly purity into all our earthly affections and passions. It interposes a positive command in all ordinary situations of society: 'Let every man have his own wife, let every woman have her own husband.' 'I will that the younger women marry, bear children, guide the house, give none occasion to the adversary to speak reproachfully.'

The few texts in St. Paul's writings, which, when isolated from their connexion, have been supposed to express a general preference for celibacy, far from inculcating any such sentiment, will be seen, when duly compared with their context, to establish the very opposite doctrine. They state, in effect, that when marriage may be to the highest degree *imprudent*, from circumstantial considerations, it is not in all cases sinful; in some cases it may be advisable, and in others even a duty, 1 Cor. vii. 9. In circumstances of αναγκη, 'distress,' tribulation, (compare Luke xxi. 23,) such in some instances, as had not been equalled in the history of the world, and never shall be exceeded; when all the powers of the state were arrayed in open hostility against the Christian cause; when a false philosophy instigated, and its most able, and most amiable disciples, as the younger Pliny and others, watched inquisitorially over the execution of a deliberate attempt to extirpate Christianity from the earth; and when its advocates and professors (for all the professors of primitive Christianity were its open advocates in some intelligible way) not only were compelled to meet in cells and 'caves of the earth' in that character, but had no certain dwelling-place as individuals; then, indeed, wrote the apostle, 'I suppose—it is good, for the present distress, for a [single] man so to be.' But even then he adds, 'Art thou bound to a wife? seek not to be loosed.' Fear not, despair not. 'If thou marry, thou hast not sinned; and if a virgin marry, she hath not sinned.' Let this doctrine be contrasted with the too common speculation of parents for the splendid misery of their children, in either persuading or compelling them into matches for the mere love of money; let it be compared with the undue severity with which what are called imprudent marriages, of which we are not the advocates, are ordinarily visited by parents, amongst whom adultery is a fashionable gaiety, especially if committed with 'the lower orders,' and fornication a mere peccadillo; let it even be taken as a test of the antichristian application and effect of that part of our marriage law which respects the royal family; and the recent unhappy agitation of these topics may yield some ultimate good.

The clear and definite limitations of divorce in the Christian Scriptures occur but infrequently, for the best of all reasons—sincere and discreet Christians can very rarely be interested in them. It is a moral question, upon which no man need seek to be experimentally informed; and the Gospel would teach us to be 'simple concerning that which is evil.' But our great Master more than once delivers a formal judgment on the topic: and the apostle Paul enlarges and confirms the spirit of the Saviour's rule.

The great duties of marriage, common to both parties, are fidelity, the cultivation of love and peace, the joint pursuit of God's glory in the order of the family, and the education of children. All the individual duties of a husband are comprehended, by inspired wisdom, under one great admonition, 'Husbands, love your wives;' on the proofs of which, however, the New Testament is not silent: while those of a wife are contained in another, 'Let the wife see that she reverence her husband.' These duties supply the best view of the nature of the tie. In point of fact, they can never be fully exercised by one party, without the concurrence of the other. So far, then, there is an essential reciprocity in them: they impart rights to each; from both they command corresponding duties. Christianity knows nothing of human rights that are not thus connected with duty. Without meaning to afford to either a justification for individual negligence on this ground—or to give at once, even to the innocent party, all the power and right of punishing the guilty—clear it is, that revelation regards marriage as a mutual interchange of rights and privileges. Does it grant a husband peculiar, and almost absolute authority? It demands of him a peculiar and equivalent protection of the gentler sex. Does it give him the ruling arm? It also describes him as the moral head of his family, particularly of his wife (Eph. v. 23); and requires from him spiritual and moral wisdom, spiritual and moral conduct, accordingly. On the other hand, has Christianity conferred on woman privileges unknown to her in the ancient world, and even amongst God's chosen people? She is exhorted also to an intelligent submission and obedience, and to exhibit an unreserved devotion to the wants and comforts of man, never before required, and fully equal to the protection she claims. They are formed to develope each other's excellencies—to bear with, and to win away each other's faults: 'The man is not without the woman,' not himself—not the man that God made, ere he would rest from his works—says this unimpeachable authority; 'nor the woman without the man, in the Lord.' Only such views of the institution can give us a correct idea of its rupture.

The same divine system clearly regards marriage as a constant interchange of duties. It

knows nothing of the modern fashion of separation; it allows no sanction, as we think, to the modern laws of partial divorce. The consideration of these subjects will necessarily lead to the only legitimate cause of divorce the Scriptures acknowledge. Separation by mutual consent, as it is called, is nothing less (and how, in point of bad faith, could it be more!) than two accountable human beings undertaking privately to contradict and renounce what they had sworn publicly, in the name of God, to do and perform. Apart from its being wholly opposed to the general obligation of lawful vows, it holds up a man and woman to the world, it sends them into the world, as neither married nor unmarried—both and neither. 'Joined together' of God, or in obedience to a law under which he has placed them, and separated by the inconveniences of keeping it! The express determination of Scripture anticipates the awful moral evils to which such a monstrous system leads. 'I wish not myself any other advocate, nor you any other adversary,' says the devout bishop Hall, to a friend who inclined to a separation, 'than St. Paul who never gave, I speak boldly, a direct precept, if not in this.' Should the remaining part of our quotation grate a little ungraciously on a delicate ear, let the substantial interests of religion and virtue, and the possible prevention of such mischiefs in other ranks, as have lately stared upon us from a throne, be our apology. His express charge whereupon I insisted is, 'defraud not one another; except with consent, for a time, that you may give yourselves to fasting and prayer: and then come again together, that Satan tempt you not for your incontinency.' Every word, if you weigh it well, opposes your part, and pleads for mine. By consent of all divines, ancient and modern, 'defrauding' is refraining from matrimonial conversation. See what a word the Spirit of God hath chosen for this abstinence—never taken but in ill part! 'But there is no fraud in consent,' as Chrysostom, Athanasius, Theophylact, expound it:' true. Therefore St. Paul adds, 'unless with consent;' that I may omit to say, that in saying, 'unless with consent,' he implies, both that there may be a defrauding without it, and with a consent a defrauding, but not unlawful. But see what he adds—'for a time.' Consent cannot make this defrauding lawful, except it be temporary: no defrauding without consent; no consent for a perpetuity. 'How long then, and wherefore? Not for every cause; not for any length of time: but only for a while, and for devotion, ut vacetis, &c. Mark how the apostle adds, 'that you may give yourselves to fasting and prayer.' It is a solemn exercise which the apostle here intends, such as is joined with fasting and external humiliation; wherein all earthly comforts must be forborne. 'But what if a man list to task himself continually?' No: 'Let them meet together again, saith the apostle; not as a toleration, but a charge. 'But what if they can both live safely thus severed? This is more than they can undertake: there is danger, saith our apostle, in this abstinence, 'lest Satan tempt you for your incontinence.' What can be more plain? *Bishop Hall's Epistles*, decad, v. ep. 9.; *Works*, vol. vii. p. 249.

The application of these remarks to our present legal practice with regard to divorce is plainly this. The apostolic rule will include a prohibition of the divorce à thoro et mensâ, except in cases of adultery. *It sanctions no partial divorces.* There is but one scriptural cause for any divorce, and then it is to be a complete one. By our ecclesiastical law (Can. 107) it is enjoined, 'that in all sentences pronounced only for divorce and separation à thoro et mensâ, there shall be a caution and restraint inserted in the act of the said sentences, that the parties so separated shall live chastely and continently; neither shall they, during each other's life, contract matrimony with another person. And, for the better observation of this last clause, the said sentences of divorce shall not be pronounced, until the party or parties requiring the same have given good and sufficient caution and security into the court, that they will not any way break or transgress the said restraint or prohibition. We are not acquainted with the kind of caution or security which is found to satisfy the learned judges of this court in such cases, but St. Paul would not have taken any. He estimated human nature, it would seem, according to a different rule; and would not believe that even devout Christians could offer such security. He would prevent the crime of adultery, by removing the temptations to it. His language is not, Meet again when ye are—but lest ye be tempted.

Permanent separation of every kind is advowtry, our old English word for adultery. It is contrary to vow. 'God will contempne advouterers and whorekeepers,' says an old version of Heb. xiii. 4, now before us. So again Wicliffe's translation of Matt. xv. 19, is, 'Of the herte gon out yvel thoughtis, mansleyngis, avoutries, &c. And of Mark x. 11. 'Whoevere leevith his wife, and weddith another, he doth avoutrie.' We vow, in marriage, 'Forsaking all other to keep to the object of our choice, 'so long as we both do live.' To take another is a final and irrevocable breach of this vow; but not to keep to the espoused object is also a breach of it: it proves and encourages alienated affection; it is the harbinger of all that is evil in the violation of this tie. Look at its consequences again in this way; the Jewish law of divorce, upon which the Christian system was introduced as an improvement, when it sent the wife away, provided for her freedom. 'When she is departed out of the house' of her husband, 'she may go,' said Moses, 'and become another man's wife.' It particularly provided, that the repudiating husband was never afterwards to reclaim her; Deut. xxiv. 4. This was a moral and merciful system, compared with which all articles of separation are both impure and cruel. They 'send away' a wife, but they keep her bound; they expose her to second attachments, which she cannot lawfully entertain; they suspend over her a husband's power, while they deprive her of his protection and his smile.

In the spirit of these remarks, we apprehend, the Christian legislator pronounced the repudiation of a husband or wife unlawful, except for a previous violation of the marriage vow. No basis of Christian morals can be more firm or orthodox than the sermon on the Mount; and here stands conspicuously the simple and unequivocal rule, '*Whosoever shall put away his wife, saving for the cause of fornication*, πορνεια, [except for whoredom, Campbell] *causeth her to commit adultery; and whosoever shall marry her that is divorced, committeth adultery.*' The same doctrine was inculcated in reply to the question of the Pharisees on this point, 'Is it lawful for a man to put away his wife? He answered and said, What did Moses command you? And they said, Moses suffered to write a bill of divorcement, and put her away. And Jesus answered and said unto them, For the hardness of your heart he wrote you this precept: but from the beginning of the creation God made them [a] male and [a] female.'—'And in the house his disciples asked him again of the same matter, and he saith unto them, Whosoever shall put away his wife, and marry another, committeth adultery against her. And if a woman shall put away her husband, and be married to another, she committeth adultery.' The exceptive clause is not here added; but it is clear, on a comparison with the passage in St. Matthew, that it may be safely understood.

2. May not the Christian moralist ask, why should we have one kind of law upon this subject for the rich, and another, or rather no law at all, in the vast majority of cases, for other classes? for *a real divorce is unattainable by our law in its ordinary course.* It must be an ex post facto law, made for each specific case, and by application in the first instance, at an enormous cost, to the highest court of appeal in the country: at once, in all instances of its occurrence, attesting the imperfect and crude state in which the subject is left in the statute-book, and precluding, by the expensive manner of proceeding necessary, the greater portion of the people from availing themselves of it. Is this a compliment that our legislators pay the middle and lower classes, supposing the crime, so conspicuous among themselves, never to desolate these walks of life! We are quite sure that the affections and fire-side feelings of these classes deserve as much protection as those of the higher orders. Let the same courts and course of law, we suggest, which are now appealed to in all cases to prove the fact of adultery, pronounce in all cases, where it is sought for, the Scriptural remedy of divorce to poor or rich, forthwith; and without additional expense.

We believe, in conclusion, that Dr. Paley is mistaken when he says, 'the law of this country, in conformity to our Saviour's injunction, confines the dissolution of the marriage contract to the single case of adultery in the wife,' for all the remedies for this evil, such as they are, regard adultery in husband or wife, as equally a ground of divorce; but we fully and heartily join in his enquiry, 'Whether a law might not be framed, directing 'the fortune of the adulteress to descend as in case of her natural death: reserving a certain proportion of the produce of it, by way of annuity, for her subsistence (such annuity in no case to exceed a certain sum), and also so far suspending the estate in the hands of the heir, as to preserve the inheritance to any children she might bear to a second marriage, in case there was none to succeed in the place of their mother by the first, and whether such a law would not render female virtue in higher life less vincible, as well as the seducers of that virtue less urgent in their suit? I would recommend this,' continues he, 'to the deliberation of those who are willing to attempt the reformation of this important but *most incorrigible class* of the community. A passion for splendor, for expensive amusements and distinctions, is commonly found in that description of women who would become the subjects of such a law, not less inordinate than their other appetites. A severity of the kind proposed applies immediately to that passion. And there is no room for any complaint of injustice, since the provisions above stated, with others which might be contrived, confine the punishment, so far as it is possible, to the person of the offender; suffering the estate to remain to the heir, or within the family of the ancestor from whom it came, or to attend the appointments of his will.'

DIURETIC, *adj.* Διερήτικος. Having the power to provoke urine.

Diureticks are decoctions, emulsions, and oils of emollient vegetables, that relax the *urinary* passages: such as relax ought to be tried before such as force and stimulate. Those emollients ought to be taken in open air, to hinder them from perspiring, and on empty stomachs. *Arbuthnot.*

Graceful as John, she moderates the reins,
And whistles sweet her *diuretick* strains. *Young.*

DIURETIC, DIURETICUS, Διουρητικος; from διουρησις, a discharge of urine. That which, when taken internally, augments the flow of urine from the kidneys. It is obvious that such an effect will be produced by any substance capable of stimulating the secreting vessels of the kidneys. All the saline diuretics seem to act in this manner. They are received into the circulation; and, passing off with the urine, stimulate the vessels, and increase the quantity secreted. Murray, in his Elements of Materia Medica, classes the super-tartrate of potassa, or cream of tartar, and nitrate of potassa, or nitre, the muriate of ammonia, or crude sal-ammoniac, potassa, and the acetate of potassa, or kali acetatum, among the saline diuretics; and selects the following from the vegetable kingdom:—scilla maritima, digitalis purpurea, nicotiana tabacum, solanum dulcamara, lactuca virosa, colchicum autumnale, gratiola officinalis, spartium scoparium, juniperus communis, copaifera officinalis, pinus balsamea, and pinus larix; and the lytta vesicatoria from the animal kingdom. The principal articles included by Dr. Cullen, in his catalogue of diuretics, are dulcamara, digitalis, scilla; some of the alliaceæ and siliquosæ; the balsams and resins; cantharides, and the diuretic salts.

DIUR'NAL, *n. s.* & *adj.* } Lat. *diurnalis*,
DIUR'NALLY, *adv.* } from *dies*, a day.
DIURNE', *adj.* } See DAY. A jour-

nal, or record of daily transactions: relating to or constituting the day; daily.

Parformed hath the sonne his arke *diurne*,
No longer may the body of him sojourne
On the orisont, as in that latitude.
Chaucer. Cant. Tales.

We observe in a day, which is a short year, the greatest heat about two in the afternoon, when the sun is past the meridian, which is the *diurnal* solstice, and the same is evident from the thermometer.
Browne's Vulgar Errours.

The prime orb,
Incredible how swift, had thither rowled
Diurnal. *Milton.*

The *diurnal* and annual revolution of the sun have been, from the beginning of nature, constant, regular, and universally observable by all mankind.
Locke.

Why does he order the *diurnal* hours
To leave earth's other part, and rise in ours?
Prior.

In my former I represented that the *diurnal* rotations of the planets could not be derived from gravity, but required a divine arm to impress them.
Sir Isaac Newton. Letters to Bentley.

As we make the enquiries, we shall *diurnally* communicate them to the publick. *Tatler.*

You with soft breath attune the vernal gale,
When breezy evening broods the listening vale;
Or wake the loud tumultuous sounds, that dwell
In echo's many-toned *diurnal* shell. *Darwin.*

DIUTU'RNITY, *n. s.* Latin, *diuturnitas.* Length of duration.

Such a coming, as it might be said that that generation should not pass till it was fulfilled, they needed not suppose of such *diuturnity*.
Browne's Vulgar Errours.

DIVULGE', *v. a.* } Fr. *divulguer;* Span.
DIVULGE'R, *n. s.* } and Port. *divulgar;* Lat. and Ital. *divulgare; dis* and *vulgo*, to spread a report, from *vulgus;* Gr πολλος, the common people. To publish; make universally known; proclaim.

Men are better contented to have their commendations suppressed, than the contrary much *divulged*.
Hooker.

I will pluck the veil of modesty from the so seeming mistress Page, and *divulge* Page himself for a secure and wilful Acteon.
Shakspeare. Merry Wives of Windsor.

I think not any thing in my letters could tend so much to my reproach, as the odious divulging of them did to the infamy of the *divulgers*. *K. Charles.*

This is true glory and renown, when God,
Looking on the earth, with approbation marks
The just man, and *divulges* him through heaven
To all his angels, who with true applause
Recount his praises. *Milton's Paradise Lost.*

These answers, in the silent night received,
The king himself *divulged*, the land believed.
Dryden's Æneid.

The cabinets of the sick, and the closets of the dead, have been ransacked to publish private letters, and *divulge* to all mankind the most secret sentiments of friendship. *Pope.*

DIVU'LSION, *n. s.* Lat. *divulsio.* The act of plucking away.

Aristotle, in his Ethics, takes up the conceit of the beaver, and the *divulsion* of his testicles.
Browne's Vulgar Errours.

DIXAN, a large town of Tigré, Abyssinia, on the side of Taranta, under the government of the Baharnegash. It is built on the top of a conical hill: a deep valley surrounds it like a trench, and the road winds spirally up the hill. The houses are flat-roofed and without chimneys. Dixan is the seat of a considerable trade in slaves. The other commodities most common here are tobacco, black pepper, white cloths, looking glasses, snuff, spirits, and large beads. It was formerly a fief under Axum. The priests are very active in the disgraceful traffic in slaves.

DIXCOVE, a British African fort, in the country of Ahantah, on the Gold Coast. It stands at the entrance of a small cove, which will admit vessels of thirty or forty tons at high water. The channel is narrow but safe, and the situation strong. It is forty miles south-west of Cape Coast Castle.

DIXMUYDEN, a town of West Flanders, in the kingdom of the Netherlands, situated in the tract called the Freye Lande, on the river Yperlee. The trade has of late declined; but there is still a great yearly horse-fair in the month of June, and the place is noted for its butter and cheese. The sea came at one time up to the walls, forming a small harbour. Here are salt refineries, soap works, and breweries. The great church is a fine building. Eleven miles south of Ostend, and twenty-four east of Dunkirk.

DI'ZEN, *v. a.* (Corrupted from *dight*.) To dress; to deck; to rig out. A low word.

Your ladyship lifts up the sash to be seen;
For sure I had *dizened* you out like a queen.
Swift.

DIZIER (St.), a town of France, in the department of Upper Marne, and ci-devant province of Champagne, seated on the Marne, at the place where it becomes navigable by boats, seventeen miles south-east of Vitri le François, and 157 east of Paris. The road between these two towns, being levelled and planted with trees, is one of the finest walks in France. St. Dizier is famous for boat-building, and contains 5900 inhabitants. It was formerly a strong fortress, being remarkable for a siege which it sustained in 1544, for six weeks against the emperor Charles V. A sharp action took place here between the French and allies on the 27th of January 1814, and again on the 26th of March of the same year.

DIZUK, a district of the province of Mekran, Persia, forming part of the country of Baloochistan. Within its precincts are seven or eight villages, designated by the general term Dizuk, though each has also a distinct name. It is governed by a chief, who receives a tenth of the produce, in wheat and dates. His revenues are computed at 60,000 or 70,000 rupees, or from £8000 to £9000 yearly.

DI'ZZY, *v. a.* & *adj.* } Sax. deusigh; Belg.
DIZ'ZINESS, *n. s.* } *duysigh.* See DAZE.
DIZ'ZARD, *n. s.* } Giddy; vertiginous; having a swimming or whirling sensation in the head; thoughtless; the verb being derived from the adjective. Dizzard, says Johnson, is a blockhead; a fool.

How fearful
And *dizzy* 'tis to cast one's eyes so low!
Shakspeare. King Lear.

Not the dreadful spout,
Which shipmen do the hurricano call,
Shall *dizzy* with more clamour Neptune's ear
In his descent, than shall my prompted sword
Falling on Diomede. *Id. Troilus and Cressida.*

All on a sudden miserable pain
Surprised thee, dim thine eyes and *dizzy* swam
In darkness. *Milton's Paradise Lost.*

Fixed seriousness heats the brain in some to distraction, and causeth an aching and *dizziness* in sounder heads. *Glanville.*

You who have stood all storms and never sunk,
And climbed up to the pinnacle of power,
And never fainted by the way, and stand
Upon it, and can look down steadily
Along the depth beneath, and ne'er feel *dizzy*.
Byron.

DLUGOSS (John Longinus), a Polish divine, was born in 1415. Having received his education at Cracow, he was taken into the service of the bishop, who gave him some considerable preferments, and appointed him one of his executors. In 1450 Dlugoss went to Palestine, and became on his return tutor to the sons of Casimir IV. He was at one time disgraced, but recalled at the end of three years, and employed on many state affairs. At length he became archbishop of Leopold, but died in 1480, before consecration. His principal work is Historia Polonica, 1615, folio; and 1712. His other writings are 1. Vita St. Stanislai, 1611. 2. Polocensium Episcoporum Vitæ, fol. 3. Vitæ Episcoporum Postpasiensium, 4to.

DMITROU, a town and circle of European Russia, in the government of Moscow, on the river Jachroma. The environs are celebrated for yellow and white apples, as also for a beautiful palace of the counts of Soltikof, to which the French set fire in 1812. Here are manufactories of cloth, leather, porcelain, and a yearly fair for horses on the 5th of September, which lasts a fortnight. It is thirty-two miles north of Moscow.

DNIEPER, Dneper, or Nieper, the ancient Boristhenes, a large river of Europe, rising in the government of Smolensko, running a long course in a south direction, and falling into the Black Sea, between Cherson and Ockzakov. From its source to its mouth, it flows entirely through the Russian dominions, a course of above 800 miles, and its navigation is only once interrupted by a series of cataracts which begin below the mouth of the Samara, and continue for about forty miles. They are not so dangerous but they may be passed in spring by loaded barks. At other seasons, the goods are landed at Kemensk, and transported by land to Kitchkase, six miles from Alexandrowsk, where they are again embarked and descend the river to Cherson. These cataracts might be rendered navigable at all seasons; and, although the expense would be considerable, the navigation would soon repay it. In 1784 the empress Catherine II. caused some of the rocks which occasioned these waterfalls to be blown up, but without any material benefit to the navigation. Above its mouth the river widens into a kind of lake or marsh, called Liman. The lower part of its course has been the scene of many conflicts between the Turks and Russians, and the upper part, in the neighbourhood of Smolensko, was the scene of some severe conflicts in Buonaparte's retreat in November 1812. Its principal tributary streams are the Berezyna, the Priepitz, the Rose and the Bog. The water, though often unfit for domestic use, abounds in fish, particularly shad, sturgeon, pike, and carp. The chief towns which it passes are Smolensko, Orcha, Mohilev, Bobryow, Kiev, Crementchong, Ekaterinoslav, Nicopol, and Cherson.

DNIESTER, or Niester, the ancient Tyras, a fine river of Europe, which rises in Austrian Galicia, and running south-east visits Choczim, dividing Podolia from Moldavia: it then separates the Turkish province of Bessarabia, from the Russian government of Catherinenslaf, and after watering Egerlik, Bender, &c., falls into the Black Sea, between the mouths of the Dnieper and the Danube. At its mouth it forms a large bay, and though somewhat dangerous to navigate, on account of rocks, the improvements lately made in it by the Russian government have induced the Poles to send a considerable portion of the produce of their soil through its medium, to the port of Odessa.

DO, *v. a.* & *v. n.* } Sax. ᵭon; Teut. *thuen;*
Do'er, *n. s.* } Goth. *doga*, from Goth.
Do'ing. } *taujan;* Gr. τευχω, to

build. Coming into our language in modern times from the same root as *to*, Mr. Tooke (Diversions of Purley) contends that it is the same word; and that, as we still put *to* before the infinitive, *do* used formerly to mark other parts of a verb not distinguished by their terminations. See To. We still, indeed, often say, when we wish to speak emphatically or formally, I do love; I did go, &c. Its present office, as an auxiliary verb, is, however, as Mr. Tyrwhitt observes, not very easy to define. But if a distinguishing termination is used with a verb, it is always omitted. It has a peculiar expletive use: thus it will perform the office of a substitute for other verbs, expressed or understood, as, I shall go, but if I Do not, will you? and beside giving emphasis on other occasions, as we have noticed, it adds vehemence to a command or entreaty, as, Do come, do; and strength to a question or negative, as, Do you love him? I do not believe him. As an active verb it signifies to practise; perform; execute with any degree of success; as also to finish and complete: Spenser uses it for to cause to be done. As a neuter verb it signifies to behave in any manner; to fare in regard to health; to succeed; to cease. The meaning of the nouns obviously follows.

Therfore whanne thou *doist* almes, nyle thou trumpe bifore thee as ypocrites *don* in synagogis and stretis, that thei be worschippid of men.
Wiclif. Matt. vi.

To him not without desert was ghouun power to write the *doyngis* of apostlis in her mynysterie.
Wiclif. Prologe to Dedis.

Unto this day they *do* after the former manners: they fear not the Lord, neither *do* they after the law and commandment which the Lord commanded the children of Jacob. *2 Kings.*

What will ye *do* in the end thereof? *Jer.* v, 31.
Do thy diligence to come shortly unto me.
2 *Tim.* iv. 9.

We *do* you to wit of the grace of God bestowed on the churches of Macedonia. *Bible.* 2 *Cor.* viii. 1.

He for despit, and for his tyrannie,
To *don* the ded bodies a vilanie,
Of alle our lordes, which that ben yslavee,
Hath alle the bodies on an hepe ydrawe.
Chaucer. Cant. Tales.

My lute, adieu! perform the last
Labour that thou and I shall waste,
And end that I have now begun;
For when this song is sung and past,
My lute, be still, for I have *done*. *Wyatt.*

For steward was excessive Gluttony,
That of his plenty poured forth to all:
Which *doen*, the chamberlain Slowth did to rest them call. *Spenser. Faerie Queene.*

A fatal plague which many *did* to dye. *Spenser.*

In this we shew ourselves weak, and unapt to be *doers* of his will, in that we take upon us to be controllers of his wisdom. *Hooker.*

Dangerous it were for the feeble brains of man to wade far into the *doings* of the most High. *Id.*

They are great speakers but small *doers*; greater in show than in deed. *Knolles's History.*

Thou canst not say I *did* it. *Shakspeare.*

Off with the crown, and with the crown his head:
And whilst we breathe take him to *do* him dead. *Id.*

May one, that is a herald and a prince,
Do a fair message to his kingly ears?
Id. Troilus and Cressida.

If there be any good thing to be *done*,
That may to thee *do* ease, and grace to me,
Speak to me. *Id. Hamlet.*

The lord Aubrey Vere
Was *done* to death. *Id. Henry VI.*

Good woman, how *dost* thou?
——The better that it pleases your good worship to ask. *Shakspeare.*

Perdition catch my soul
But I *do* love thee; and when I love thee not,
Chaos is come again. *Id. Othello.*

Fear not, my lord, we will not stand to prate;
Talkers are no good *doers*: be assured,
We go to use our hands and not our tongues.
Shakspeare.

I have but killed a fly.—
—But how if that fly had a father and mother?
How would he hang his slender gilded wings,
And buz lamented *doings* in the air! *Id.*

No man, who hath to *do* with the king, will think himself safe, unless you be his good angel and guide him. *Bacon.*

The jury prayed of the senate a guard, that they might *do* their consciences. *Id.*

The Turks *do* acknowledge God the Father creator of heaven and earth, being the first Person in the Trinity, though they deny the rest.
Bacon's Holy War.

Too much thinking doth consume the spirits; and oft it falls out, that while one thinks too much of *doing*, he leaves to *do* the effect of his thinking.
Sir P. Sidney.

Hitherto appertaineth the saying of St. John, how that the children of God cannot sin; speaking not of the present time only, but finally and perpetually, no less attributing to God's seed, which he saith *doth* abide in them that are born of God, than to the seed of the devil in our corrupt nature and flesh.
Manuscript Note of Bradford the Martyr.

To will implies delay, therefore now *do*. *Donne.*

The same act varies in the manner of *doing* and in the intention of the *doer*. *Bp. Hall. Contemplations.*

No sooner he does peep into
The world, but he has *done* his *doe*. *Hudibras.*

Go to the reading of some part of the New Testament, not carelessly, or in haste, as if you had a mind to have *done*; but attentively, as to be able to give some account of what you have read.
Duppa.

But God like his unwearied bounty flows;
First loves to *do*, then loves the good he *does*.
Denham. Cooper's Hill.

At length a reverend sire among them came,
And of their *doings* great dislike declared,
And testified against their ways. *Milton.*

Thus painters Cupids paint, thus poets *do*
A naked god, blind, young, with arrows two.
Sidney.

Doing good is the only certainly happy action of a man's life. *Id.*

I have been deterred by an indisposition from having much to *do* with steams of so dangerous a nature. *Boyle.*

Men are many times brought to that extremity, that, if it were not for God, they would not know what to *do* with themselves, or how to enjoy themselves for one hour. *Tillotson.*

When all is *done*, there is no man can serve his own interest better than by serving God. *Id.*

No men would make use of disunited parties to destroy one body, unless they were sure to master them when they had *done with* them. *Stillingfleet.*

It may be indeed a public crime, or a national mischief; yet it is but a private act, and the *doer* of it may chance to pay his head for his presumption.
South.

As every prince should govern as he would desire to be governed, so every subject ought to obey as he would desire to be obeyed, according to the maxim of *doing* as we would be *done* by. *Temple.*

—Loose me.—I will free thee.
—*Do*, and I'll be thy slave.
Dryden's King Arthur.

When *did* his pen on learning fix a brand,
Or rail at arts he did not understand? *Dryden.*

Gigantick hinds, as soon as work was *done*,
To their huge pots of boiling pulse would run. *Id.*

Though lending to foreigners, upon use, doth not at all alter the balance of trade between those countries, yet it *does* alter the exchange between those countries. *Locke.*

What had I to *do* with kings and courts?
My humble lot had cast me far beneath them.
Rowe.

'Tis true, I *did* so; nor was it in vain:
She *did* me right, and satisfied my vengeance. *Id.*

Come, 'tis no matter; we shall *do* without him.
Addison.

You may ramble a whole day, and every moment discover something new; but when you have *done*, you will have but a confused notion of the place.
Spectator.

They *did* their work and dined. *Prior.*

What is the reason a man's arm wont smile and frown, and *do* all the intellectual postures of the countenance? *Collier.*

Acts of mercy *done* to the poor, shall be accepted and rewarded as *done* to our Saviour himself. *Atterbury.*

You *do* her too much honour: she hath neither sense nor taste, if she dares to refuse you. *Swift.*

After such miraculous *doings*, we are not yet in a condition of bringing France to our terms. *Id.*

Expletives their feeble aid *do* join. *Pope.*

Having *done with* such amusements, we give up what we cannot disown. *Id.*

Part of the work being already *done*, more care is naturally bestowed on the other part. *Johnson.*

O my soul, look back but a few years, and thou wast nothing!—And how *didst* thou spring out of that nothing?—Thou couldst not make thyself. *Mason.*

What I have *done* is *done*; I bear within
A torture which could nothing gain from thine:
The mind which is immortal makes itself
Requital for its good or ill. *Byron.*

DO, in music, a note of the Italian scale, corresponding to *ut* of the common gamut. See Music.

DOAB; a name which, according to Mr. Hamilton, should include all the territory between the Jumna and the Ganges; but the term is usually restricted to the southern portion of it, comprehended, for the most part, in the province of Agra, and, during the Mogul government, subdivided into the districts of Furruckabad, Kanoge, Etaweh, Korah, Currah, and Allahabad. There are several Doabs in Hindostan, the name meaning any tract of country included between two rivers.

The cultivated part of this country is very fertile. Tamarind and mango trees abound every where; the millet is also raised, and, although a small-eared grain, furnishes straw ten feet long, which is of great use as provender. Barley and the sugar-cane are likewise cultivated; and, in the neighbourhood of Kanoge, considerable quantities of tobacco. Indigo is found in a wild state, and of superior quality. The cattle are generally small. The climate of the Doab is excessively sultry in April and May, before the commencement of the rains; and even in the winter season it is the morning only that is cool. The natives manufacture a coarse cotton cloth, dyed red with cheap materials. Dowlet Row Sindia on the 30th December 1803, ceded his part of this country to the British. The southern part of the Doab was ceded, during the administration of the marquis Wellesley, in 1801, by the reigning Nabob of Oude, Saadet Ali.

DOABEH Barry, or Bari Residence, a district in the province of Lahore, situated between the Beyah and Ravey rivers, and the thirtieth and thirty-first degrees of north latitude. In modern maps this territory is placed in Mooltan; but, according to Abul Fazel's arrangement, in 1582, says Mr. Hamilton, it belonged to Lahore. This country, named also Manjha, contains the cities of Lahore and Amritseer; and becomes, in consequence, the great centre of the power of the seiks. It is of the same general climate and soil as

Doabeh Jallinder, another district in the province of Lahore, included between the Sutuleje and Beyah rivers, and for the most part between the thirtieth and thirty-first degrees of north latitude. This is the most fruitful of all the possessions of the seiks. The soil is light, but well watered and very productive; and the country, which is open and level, abounds in grain. The principal towns are Jalindra and Sultanpoor. This territory is principally occupied by the Malawa Singh Seiks, who are called the Doabeh Singhs, or Singhs who dwell betwixt two rivers.

DOAT, *v. n.* See Dote.

DOBSON (William), an eminent English portrait and historical painter, born at London in 1610. He served an apprenticeship with one Peck, a stationer and picture dealer; and owed his improvement to the copying some pictures of Titian and Van Dyck, whose manner he always retained. A picture of Dobson's being exposed at a shop in Snowhill, Van Dyck passing by was struck with it; and enquiring after the author, found him at work in a garret. Van Dyck generously equipped him in a manner suitable to his merit; and presented him to king Charles I. who took him under his protection, kept him with him at Oxford all the time he continued in that city, and not only sat to him several times for his picture, but caused the prince of Wales, prince Rupert, and most of the lords of his court, to do so too. Dobson, however, being extravagant, did not improve the many opportunities he had of making his fortune; and died very poor in 1647, at his house in St. Martin's Lane.

DOBUNI, or Boduni, an ancient people of Britain, who possessed the territory which now forms the counties of Oxford and Gloucester. Both the names of this British people seem to have been derived from the low situation of a great part of the country which they inhabited: for both Duvn and Bodun, signify profound, or low, in the ancient language of Gaul and Britain. The Dobuni are not mentioned among the British nations who resisted the Romans under Julius Cæsar, which was probably owing to the distance of their country from the scene of action; and before the next invasion under Claudius, they had been so much oppressed by their ambitious neighbours the Cattivellauni, that they willingly submitted to the Romans. Cogidunus, who was at that time prince of the Dobuni, recommended himself so effectually to the favor of Claudius, by his ready submission, that he was not only continued in the government of his own territories, but had other states put under his authority. This prince remained so steady a friend and ally to the Romans, that his subjects never revolted, nor stood in need of forts or forces to keep them in subjection. So that we meet with very few Roman towns and stations in the country anciently inhabited by the Dobuni. The Durocornovium of Antoninus, and the Corinium of Ptolemy, are believed by antiquaries to have been the same place, the capital of the Dobuni, and situated at Cirencester, in Gloucestershire, where there are many marks of a Roman station. Clevum or Glevum, in the thirteenth iter of Antoninus, stood where the city of Gloucester now stands; and Abone, in the fourteenth iter, was probably situated at Avinton on the Severn.

The country of the Dobuni was comprehended in the Roman province, Britannia Prima.

DOCE Rio, a river of Brasil, which rises near the town of Villa Rica, and after a north course, through a fine country, turns eastward and discharges itself into the Atlantic, in lat. 19° 30′ S. It has a course of about 500 miles. Until lately the fertile neighbourhood of this river has been totally neglected: otherwise the abundance of timber, cotton, and sugar, it is capable of yielding, would long since have found their way to European markets. There is another river of this name, which falls into the ocean in lat. 8° 10′ S.

DOCETÆ, from δοκειν, to appear, in ecclesiastical history, the followers of Julius Cassianus, one of the Valentinian sect, towards the close of the second century, who revived a notion that had been adopted by a branch of the Gnostics, against whom St. John, Ignatius, and Polycarp, had asserted the truth of the incarnation. They believed and taught, as their name imports, that the actions and sufferings of Jesus Christ were not in reality, but only in appearance.

DOCIL'ITY, *n. s.* } Fr. *docile*; Span. and
Do'CILE, *adj.* } Portug. *docil*; Ital. and
Do'CIBLE, *adj.* } Lat. *docibile*, *docile*, from
Do'CIBLENESS, *n. s.* } *facilis* easy, and *doceo* to teach; Gr. δοκεω, to judge, דוק, à Chald. to observe. Teachableness; aptness to receive instruction. The adjectives and substantives are respectively, synonymous.

The asinine feast of sow-thistles and brambles is commonly set before them, as all the food and entertainment of their tenderest and most *docible* age.
Milton.

I might enlarge in commendation of the noble hound, as also of the *docibleness* of dogs in general.
Walton's Angler.

What is more admirable than the fitness of every creature for our use? the *docility* of an elephant, and the insitiency of a camel for travelling in deserts?
Grew.

All the perfection they allowed his understanding was aptness and *docility*, and all that they attributed to his will was a possibility to be virtuous. *South.*

Soon *docile to* the secret acts of ill,
With smiles I could betray, with temper kill.
Prior.

Dogs soon grow accustomed to whatever they are taught, and, being *docile* and tractable, are very useful.
Ellis's Voyage.

DOCIMASIA, in Greek antiquity, a probation of the magistrates and persons employed in public business at Athens. It was performed publicly in the forum, where they were obliged to give account of themselves and their past lives before certain judges. Among several questions proposed to them, we find the following: whether they had been dutiful to their parents, had served in the wars, and had a competent estate!

DOCIMASTIC Art, a name given to the art of assaying by operations in small, the nature and quantity of metallic or other matters which may be obtained from mineral or other compound bodies. See Metallurgy and Refining.

DOCIMENUM Marmor, a name given by the ancients to a species of marble of a bright and clear white, much used in large and sumptuous buildings. It had its name from Docimenos, a city of Phrygia, near which it was dug, and whence it was sent to Rome. It was accounted little inferior to the Parian in color, but not capable of so elegant a polish; whence it was less used by the statuaries, or in the smaller works. Adrian used this marble in building the temple of Jupiter; and many other of the great Roman buildings are formed of it.

DOCK, *n. s.* Sax. ᵹocca. A plant; a weed.

Nothing teems
But hateful *docks*, rough thistles, kecksies, burs,
Losing both beauty and utility.
Shakspeare. Henry V.

My love for gentle Dermot faster grows
Than yon tall *dock* that rises to thy nose:
Cut down the *dock*, 'twill sprout again; but know,
Love rooted out again will never grow. *Swift.*

The species are seventeen, ten of which grow wild, several of them being used in medicine; and the sort called the oriental *burdock*, is said to be the true rhubarb. *Miller.*

Dock, in botany. See Rumex.

Dock, *v. a.* & *n. s.* } From Fr. *ecouer*, *decouer*,
Dock'ET, *n. s.* } to dock, à Lat. *cauda*, a tail. To cut short, or trim: as a substantive, the thing trimmed or cut short: a docket is an abridged writing, a summary of legal proceedings.

The Reve was a slendre colerike man,
His berd was shave as neighe as ever he can,
His here was by his eres round yshorne;
His top was *docked* like a priest beforne.
Chaucer. Prologue to Cant. Tales.

The tail of a great rhinoceros is not well described by Bontius. The *dock* is about half an inch thick, and two inches broad, like an apothecary's spatula.
Grew's Museum.

One or two stood constant century, who *docked* all favours handed down; and spread a huge invisible net between the prince and subject, through which nothing of value could pass. *Swift's Examiner.*

Dock, *n. s.* & *v. a.* Flem. *dok*; Teut. *dock*; Swed. *docka*; Suid-Goth. *docka*; perhaps from *dekken*, to cover, protect, secure; and all these from Gr. δοχειον, a receptacle; νεωδοικος (the ship-house), a dock. An enclosed receptacle for ships: see the article. Also an enclosed place for prisoners in a court of justice. As a verb, to put in dock.

The boatswain and mariner may bring religion to what *dock* they please. *Howel.*

There are *docks* for their gallies and men of war, as well as work-houses for all land and naval preparations. *Addison.*

Dock, in the manege, is used for a large case of leather, as long as the dock of a horse's tail, which serves it for a cover. The French call the dock troussequeue. It is made fast by straps to the crupper, and has leathern thongs that pass between his thighs, and along his flanks to the saddle straps, in order to keep the tail tight, and to hinder it from whisking about.

Docks, for shipping, are enclosed excavations or basins formed in rivers and harbours, for the receiving, building, or repairing of ships. They are constructed of brick, stone, or timber; with locks or flood-gates, pointed to or from the tide, to keep the water in or out, as the object and nature of the docks require.

Wet Docks are for the reception of ships to lie afloat while loading or unloading, with gates pointed from the tide, to keep the water in at low water. Locks are attached to them, generally with double gates, for the more easy admission and egress of shipping; and, to aid the operation of opening and shutting these gates, sluices are made within to regulate the water, until the same level is produced within as without. A wet dock without gates is called, both by the French and ourselves, a *basin*; a dry dock is with them *une forme*, and a slip, *un calle*. Wet docks are in fact artificial harbours for the keeping a vessel afloat at all periods of the tide; and to no other modern improvement do our great commercial towns owe so much of their general superiority and opulence. Liverpool, as it has been often remarked, might still have remained a poor fishing village without them.

Basins, or docks open to the tide, are called Dry Docks, because the vessels frequenting them ground at low water, and lie dry on the ebb tide, and float again on the next rise of the tide. They are used at Liverpool as entrances to the wet docks, and are frequented by coasters, and small or light vessels, that do not injure by lying on the shore. Dry as well as wet docks are enclosed with gates which exclude the tide as circumstances may require; and often have the interior water completely pumped out by means of horses and machinery, or the steam engine. Here ships are conveniently built and floated out: though generally there are places set apart for this purpose, called *slips*. The port of Liverpool, from the badness of its harbour, the rapidity of the river Mersey, and the shifting of its sands, resorted to the construction of docks in 1708. The management of the first undertaking of this kind was invested in the corporation for the term of twenty-one years, which gave for this purpose four acres of land; and they were empowered to borrow the sum of £6000. In 1717 the term was prolonged for fourteen years, and they were authorised to borrow £4000 more. In 1737 the term was further extended to thirty-one years, and powers given to make an additional dock, to build a pier in the open harbour, and to light the docks. The corporation on this occasion gave seven acres of land, and they were empowered to borrow £6000. In 1761 the commerce of Liverpool was so much increased, and its shipping had become so numerous, and so enlarged in size, that further accommodation was wanting. The term of the corporation's management was again extended for twenty-one years, with powers to make another dock, and to erect a light-house for the benefit of the port; for these purposes they were authorised to borrow the sum of £25,000, and to raise the further sum of £2000 on the light-house duties. In 1784 the powers of all the former acts were enlarged, and the term extended to forty-one years, with liberty to make two additional docks and piers, and to borrow for this purpose £70,000. In 1799 an act was passed to alter and enlarge the powers of former acts, and to render the docks and the port more commodious and safe; by which a further extension of term was granted for thirty years. The corporation again gave some lands, and they were empowered to make two additional docks, and other docks; with liberty to raise the sum of £120,000, and to double the former tolls.

Under the authority of these various acts of parliament the several docks have been constructed, and it has been found that each successive improvement, by affording additional convenience to foreign trade, has been followed by its increase, and prepared the way for the further extension of this excellent system of accommodation. In the course of the last century there were established within this port six wet and three dry docks, and five graving or repairing docks, independent of the Duke of Bridgewater's dock, for canal purposes. In the ten years, ending with 1808, the number of ships that entered these docks was 48,497, tonnage 4,954,204; and the dock duties received £329,566; in the following ten years, ending in 1818, the number of ships was 60,200, the tonnage 6,375,560, and the amount of duties £666,438. Hull, Bristol, and Leith, have successfully emulated this example.

In 1794 a general meeting of merchants was convened, to consider the great inconveniences of the port of London, arising from the crowded state of the river, and the confined extent of the legal quays; when a committee was appointed to consider of the best mode of relief, who took into consideration all the plans which had been suggested, when they approved of the plan for making *wet docks* in Wapping with wharfs and warehouses on their borders, as the most effectual means of remedying the evils of the port. In consequence of this determination, Mr. Daniel Alexander, an ingenious architect and surveyor, who was conversant with operations connected with the tide, was directed to make a survey, and prepare plans and estimates for forming docks at Wapping, with the addition of a cut or canal leading to them, from that part of Blackwall where the present East India docks are now situated, and a long line where the West India docks have been since constructed. The plan and estimates were laid before a meeting of merchants, held 22d December, 1795, and the sum of £800,000 subscribed towards their completion in a few hours. A committee was appointed to make application to parliament, who presented a petition in January 1796, which was referred to a select committee of the house of commons, who were directed 'to enquire into the best mode of providing sufficient accommodation for the increased trade and shipping of the port of London.' The project of the merchants experienced great opposition both from the corporation of the city of London and from private interests; and a great variety of plans and projects were brought forward for the extension of the legal quays above and below the bridge, and the improvement of the river with or without docks. At length, through the great exertions and perseverance of William Vaughan, esq. assisted by several other highly respectable mercantile characters, the various obstacles to the plan of the London docks were successively overcome, and in August, 1798,

the subscribers gave notice, that in the ensuing session of parliament they meant to renew their application for forming docks at Wapping. In December following they petitioned for leave to bring in a bill for this purpose. A few days after a petition was presented by the corporation of London, with a view to similar objects, by making a navigable canal or passage across the Isle of Dogs from Blackwall to Limehouse, purchasing the mooring-chains in the river, which were mostly private property, and appointing harbour-masters to regulate the navigating and mooring of vessels in the port; they also proposed to make wet-docks in some part of the Isle of Dogs for the reception and discharge of West India shipping. The latter part of the plan had, however, been taken up by a number of *West India* merchants and planters, who had formed themselves into a company distinct from the subscribers to the London docks, for the purpose of forming docks for the reception of the West India trade only, either alone, or in conjunction with the other improvements projected by the corporation. The general conviction of the necessity of some measure of this kind was not sufficient to produce a union of interests in favor of either of the proposed plans. At length the committee of the house of commons made a report, recommending the formation of wet-docks as the only remedy for the evils of the port, and that they should be made both at Wapping and the Isle of Dogs, but that the latter should be adopted first. The corporation and the West India merchants of London forming a junction, the act for making the West India docks passed in July, 1799. In the next session, on the 30th June, 1800, an act was passed for forming the docks at Wapping, which was followed by other acts for making docks at Blackwall for the East India trade.

The first stone of these last docks was laid in March 1805, and the first ship entered them in August, 1806. The dimensions of the dock for unloading, inwards, are 1410 feet in length, and 560 feet in width, containing about eighteen acres and one-eighth: the dock for loading outwards, which was a part of Mr. Perry's dock, is 780 feet in length, and 520 feet in width, containing nine acres and one-fourth. The extent of the entrance basin, which connects them with the river, is two acres and three-fourths; the length of the entrance lock 210 feet; the width of the gates forty-eight feet in the clear, and the depth of water at ordinary spring-tides twenty-four feet. The great West India dock is 420 yards in length, and 230 yards in width, covering an area of twenty acres. A basin of three acres nearly connects it with the river. The warehouses are most noble buildings: the tobacco warehouse is the most spacious erection of the kind in the world; being capable of containing 25,000 hogsheads of that article, and the vaults underneath as many pipes of wine. This single building, under one roof, is said to occupy upwards of four acres of ground. These docks were opened in February 1805.

The dry docks and slips of his majesty's yards have recently added to their other improvements, that greatest of the whole, the actual covering or roofing in of vessels, a plan which seems to have been long since used at Venice. Roofs have been thus constructed at Plymouth of ninety-five feet span, without a single beam, and one at Chatham, under the direction of Mr. Seppings, of 100 feet, and having an entrance width of 150 feet.

The wicket-gate of docks, a contrivance resorted to where the abutments are too weak for swinging gates, is represented below. Fig. 1 the plan; fig. 2 the elevation. It consists of three parts, which, when opened, are removed separately, and is the most simple, though by no means the most effective, contrivance for keeping out the water.

Fig. 1.

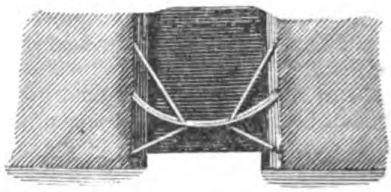
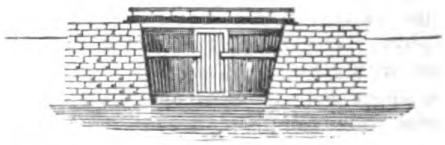
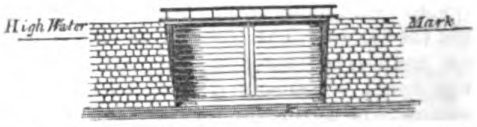


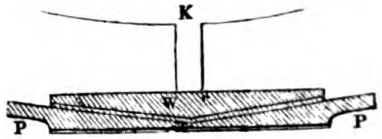
Fig. 2.



We also give below a diagram of swinging gates, which open in the middle, and lie flat, one part against each wharf or side-wall of the passage, leading into the dock or basin. This kind of gate is made with sound timber, and good iron, of great strength, and the gudgeons on which the hinges turn, must be well secured in the abutments. The bottom of the passage, and of the gates, must be also perfectly plane and parallel, to prevent leakage, and give facility to their opening and shutting. This is usually aided by rollers fixed in a groove, and turned by means of a small capstern on each pier. At top is often placed a foot bridge with railing.



In *docking* a ship formerly, if her keel required inspection or repair, it was found necessary to lift up her whole immense weight off the blocks; but about twenty years ago, Mr. Seppings contrived a very simple and excellent improvement, by which twenty men will suspend the largest ship in the navy, or, which amounts in practice to the same thing, will disengage any one block that may be required in the space of two or three minutes, without the necessity of suspending her. This improvement may be thus exhibited:



K is the keel; W the wedge on which the keel rests, having its obtuse angle equal to 170°, and PP are two inclined planes, having each an acute angle of 5°. The wedge is of iron or hard wood, having its two sides lined with iron; the inclined planes are of cast iron. A few smart blows on the two sides of the inclined planes will disengage them, when the middle part or wedge drops.

Dock-Yards, in the navy, are magazines of naval stores, and timber for ship-building; the royal dock-yards in England are those at Chatham, Deptford, Pembroke, Plymouth, Portsmouth, Sheerness, and Woolwich. In time of peace, ships of war are laid up in these docks, in ordinary; those of the first rates mostly at Chatham, where, and at other yards, they receive, from time to time, such repairs as are necessary.

Chatham dock-yard consists of a line of wall, extending 5500 feet along the right bank of the Medway, being 400 feet in width at the upper, 800 at the lower end, and 1000 feet in the middle. Its superficial area is about ninety acres. In front it has six building-slips of different sizes, and four dry-docks. At the southern extremity is the ropery, hemp, and yarn houses, rigging and general storehouses, 1000 feet in length, by about fifty in breadth; in front of which, and along the wharf, are the anchor racks, nearly 1000 feet long. Next to these are the slips and docks, with the working sheds and artificers' shops in the rear, an excellent smithery, timberbirths, deal and iron yard, seasoning sheds, &c. The commissioner's house and garden are in the centre, and, on the eastern extremity of the yard, the officers' houses and gardens. The lower or north-east part is occupied by mast-ponds, mast-houses and slips, store boat-houses and slips, ballast-wharf, timberbirths, and saw-pits.

The river Medway constitutes the only wet-dock or basin appertaining to this yard; and it is sometimes so shallow, and the navigation so intricate, that vessels are obliged to take in their stores and provisions at various different points, a circumstance that often delays them here much longer than even at Deptford.

The saw-mill of Mr. Brunell, lately erected here, is supposed to be equal to the power of fifty saw-pits, and one hundred sawyers; and is capable of supplying the dock-yards of Chatham and Sheerness with all their straight-sawn timber. The greatest advantage of the plan is its application of the steam-engine to the management and arrangement of the timber, by which the labor and expense of a vast number of horses are saved. See Saw-mill.

In war the dock and rope-yard of Chatham employed together about 2250 men.

Deptford yard has a front or wharf wall facing the Thames, of about 1700 feet in length, the mean breadth of the yard 650 feet, and the superficial area about thirty acres. It has three slips for ships of the line, and two for smaller vessels on the face next the river, with a basin, or wet-dock, 260 by 220 feet. Here are also three dry-docks, one of them a double dock, communicating with the Thames. The proximity of Deptford Dock-yard to the capital is a great convenience, and it became, during the last war the general magazine of stores and necessaries for the fleet, whence they were transmitted as occasion required to the other yards, the out-ports, and foreign stations.

The great storehouse is a large quadrangular building surrounding a square, of three stories in height, with cellars underneath, for pitch, tar, rosin,&c. Its length is about 210 feet, but the sides vary in width from forty-six to twenty-four feet. Parallel to the west front is the rigging-house and sail-loft, 240 feet, and nearly fifty feet wide, in which all the rigging is fitted for ships and stowed away. On the eastern side is the pavilion, a long range of buildings, in which the beds, hammocks, and slop-clothing are kept, and in which also are the house-carpenters', the joiners', and wheelwrights' shops. This range is about 580 feet long by twenty-six feet wide. Other buildings are an excellent blacksmith's shop, plumbers', glaziers', and painters' shops, seasoning-sheds, store-cabins, saw-pits, mast-house and pond, boat-houses, mould-loft, timberbirths, besides houses and gardens, coach-houses and stabling, for the officers. The number of men employed here, in time of war, was about 1500, of whom about one-half were shipwrights. There were, besides, in constant employ, eighteen or twenty teams, of four horses each. Adjoining to the dock-yard is the victualling-yard, the most complete establishment of the kind in the kingdom. The principal naval stores kept at Deptford are small cordage, canvas and ship sails, hammocks, beds and hair for beds, slops and marine clothing, and anchors under the weight of about seventy-five cwt.

Pembroke dock-yard was a small establishment for the building of vessels undertaken at the close of the war. It contains an area of sixty acres, ascending from the southern shore of Milford Haven, about two miles from the town of Pembroke. Here are two dry-docks and twelve building-slips which are built of wood on a limestone foundation. There have never been above 500 hands employed here.

Plymouth dock-yard extends along the shores of Hamoaze, in a circular sweep of 3500 feet, its width about the middle being 1600, and at each extremity 1000 feet. Its superficial area is about ninety-six acres. In the front towards the harbour are two dry-docks for ships of the first rate, a double dock for seventy-four gun ships, communicating with Hamoaze, and another dock for ships of the line, opening into the basin, which is 250 feet long by 180 feet wide. There is also a graving dock without gates, and a canal or camber, similar to that in Portsmouth yard, for the admission of vessels bringing stores. This, communicating with the boat-pond, cuts the dock-yard nearly into two parts. Five jetties project from the entrances of the dry-docks into Hamoaze, along side of which ships are brought to be undocked. These are situated between the centre and the northern extremity of the harbour line. On the south are three building-slips for the largest class of ships, and two for smaller vessels, the smithery, the outer mast-pond and mast-houses, timberbirths, and saw-pits. Higher up on this end is an extensive mast-pond and mast-locks, with

plank-houses over them; and above these three hemp magazines, close to which is the noble ropery of this establishment, consisting of two ranges of buildings, one the laying-house, the other the spinning-house, each being 1200 feet in length, and three stories high. No wood has been used in the construction of the rope-house, excepting the shingles of the roof, to which the slates are fastened. All the rest is of iron; so that the whole building is considered as fire-proof.

The northern part of the yard, besides the docks and basin, working sheds and artificers' shops, contains a quadrangle of elegant stone buildings, the longer sides being about 450 feet, and the shorter 300 feet. Within are also two new ranges of magazines, built principally with iron instead of wood. The upper and northern part of the yard is occupied by a range of handsome houses, with good gardens, for the commissioner and principal officers of the yard, the chapel, guard-house, pay-office, stabling for the officers and teams, and a fine reservoir of fresh water. Plymouth is an excellent refitting yard, and employed, during the war, upwards of 3000 hands of various descriptions. Here, as at Portsmouth, is an unconnected victualling establishment.

In the time of Edward VI. *Portsmouth* was the only dock-yard that could be considered as a national one; indeed it was almost the only naval station in England. All the ships in the public service, amounting to fifty-three in number, lay in this port, with the exception of three, two of which lay at Deptford and one at Woolwich. The crews belonging to these vessels, including soldiers, marines, and gunners, did not amount to 8000 men; yet, from such beginnings has the naval power of England risen to a height unparalleled in history. Edward, sensible of the great consequence of this port to the future glory of his kingdom, augmented its fortifications by the addition of two strong castles. But Portsea has the advantage of having both the dock-yard and gun-wharf within its precincts.

The former is entered from the town by a lofty gateway, after passing which the first objects that attract attention, are the porter's residence, the mast-houses, and a large modern guard-house. A little further on stands the pay-office; and beyond it is the royal naval academy, which consists of a centre and two wings. This building is furnished with every requisite accommodation for naval instruction, and has an excellent observatory on its summit. The commissioner's house next appears, and to it succeeds an immense range of store-houses, to the right of which is a handsome modern chapel; thence a visitor is generally conducted through the anchor-wharf, where hundreds of anchors of every size and description are piled up ready for immediate service; then to the rope-house, a spacious pile three stories high, fifty-four feet broad, and 1094 feet long. Here the cables are formed with immense labor; but of late years the operation is much facilitated by the use of machinery. The operations in this division of the yard are particularly ingenious and highly interesting. Leaving it, and passing various store-houses, stables, and other buildings, and many vast piles of timber for the service of the yard, a sort of square presents itself to the view, and displays in its centre a statue of William III. in a Roman habit. On the east side of this square is a row of handsome houses appropriated for the residence of the chief officers of the yard, and on the north and south sides are various offices, store-houses, &c. Proceeding onwards, the next impressing object that arrests the attention is the vast building called the anchor-forge, and, on entering it, both the eye and ear are confounded by the terrific noise and scenes, which spread throughout this Vulcanic abode. Many of the anchors which are here wrought weigh from seventy to ninety tons each.

Approaching nearer the harbour the visitor beholds, in time of war, numerous ships upon the stocks, either building or repairing. The jetty heads, with the basins and docks, are next in order, and, with the shipping in the haven, present a very grand and imposing spectacle, to which the extraordinary capaciousness of the new range of docks greatly contributes. These immense works are all peculiarly adapted for their respective purposes, and while the ships are under repair are kept completely dry; but, in their immediate vicinity, the depth of water is sufficient to float the largest vessels in the navy. Many other parts of this celebrated arsenal, and particularly the rigging houses, claim the examination of the curious. The number of workmen employed in this dock-yard is very great, but varies considerably. In time of peace seldom fewer than 2000 are kept at constant work in its different departments. Here, as at Plymouth, the workmen receive sixpence a day as a commutation for their former perquisite of chips.

The sea-wall of this yard extends from north to south about 3800 feet, and has a mean depth of about 2000 feet. The area enclosed is about 100 acres. The great basin, into which enter four fine dry-docks, is 380 feet in length by 260, and contains an area of two acres and one-third. Here are two docks, at the ends, opening into the harbour; the whole six being capable of receiving vessels of the largest dimensions. Here is also a camber, with a wharf-wall on each side 660 feet in length, and of sufficient width to admit of transports and merchant-ships bringing stores to the yard. In the same face of the yard are three building-slips capable of receiving the largest ships; a small one for sloops; two building slips for frigates on the northern face of the yard, and a smaller slip for sloops. The range of store-houses on the north-east side, and the rigging-house and sail-loft on the south-west side of the camber, are magnificent buildings. The two hemp-houses and the two sea-store houses occupy a line of building which extends 800 feet. The rope-house, tarring-house, and other appendages of the ropery, are on the same scale. The two sets of quadrangular store-houses, and the two corresponding buildings, with the intervening timber-births and saw-pits, at the head of the dry-docks, issuing from the great basin, are also all excellent. The smithery is on a large scale, and close by is an iron-mill, a copper-mill, and a copper refinery, at which is remelted and rolled all the old copper which is taken from ships'

bottoms: here, also, are cast bolts, gudgeons, and various articles of copper used in the navy. The number of sheets manufactured in one year of the war amounted to about 300,000, weighing above 12,000 tons.

The WOOD MILLS are at the head of the north dock, at which every article of turnery, rabbitting, &c., is made for the use of the navy. The principal part of these mills is the machinery for making blocks contrived by Mr. Brunell. See our article BLOCK-MACHINERY.

Notwithstanding that every precaution that can be devised is taken, to guard against the destructive element of fire, three great conflagrations have occurred in this dock-yard since the year 1760. The first, which appears to have been accidental, broke out in the night of the 3rd of July, 1761, and raged for a long time with dreadful fury. The night had been extremely tempestuous; and the fire was attributed to the lightning striking upon the hemp storehouse, the windows of which had been left open to air it. By this conflagration many hundred tons of tar, 500 tons of cordage, 700 sails, and 1050 tons of hemp, were totally consumed. The second fire occurred on the morning of the 27th of July, 1770, when the damage done was still greater; and it was even for some time doubtful whether any part of the yard would escape destruction. From its bursting forth at different places at one time, and various other circumstances, great suspicions were entertained of its having been occasioned intentionally, but the officers were unable to discover the offenders. The third fire happened on the 7th of December, 1776, and in this instance was undoubtedly the effect of design, as the incendiary was traced, tried, condemned, and executed, upon incontestable proof, afterwards confirmed by his own confession. The real name of this malefactor was John Aitken; but the appellation by which he is commonly known is that of 'Jack the Painter.' He is supposed to have acted under foreign influence, and had previously attempted to destroy the docks at Plymouth and Bristol, but failed in both those attempts, though he excited very considerable alarm. His plans were laid with great sagacity and forethought; and, in order the more effectually to ensure their success and avoid suspicion, he had invented a very ingenious machine, which he contrived to lodge among the cordage over night, and setting fire to it left it, and passed out of the gates in the morning unmolested. In the course of the same day the fire broke out, as it luckily happened, several hours before the incendiary had purposed, for, had it not begun to display itself till after the fall of night, the destruction would probably have been much greater than it was. The immediate and effective assistance which was given to check the progress of the flames, and the favorable direction of the wind, confined the damage to the rope-house, and a few adjoining store-houses. The incendiary immediately quitted Portsmouth, but was apprehended about two months afterwards, and, his villany being distinctly traced, he suffered the penalty of the law on the 7th of March, 1777, having previously made all the reparation to his country in his power, by pointing out some effectual measures for securing the dock-yards from similar attempts.

Portsmouth dock-yard, during the war, employed above 4000 workmen, of whom about 1500 were shipwrights and caulkers; 500 joiners and house-carpenters; the smiths nearly 200; the sawyers 250; the riggers 200; other laborers about 700; and the ropers 350.

Sheerness dock-yard is situated on the island of Sheppey, on a point of land composed of sand and mud, brought from the sea on the one side and down the Medway on the other. It commands the mouths of both this river and the Thames. Till a short time ago this was a very unhealthy and disagreeable place, and as a dock-yard totally destitute of convenience or arrangement. The whole premises of the dock-yard, indeed, divided among wharfs and buildings belonging to the ordnance department, did not exceed fifteen acres of ground. It had at this period only two small inconvenient docks for frigates or small vessels. These inconveniences of Sheerness suggested at one time an extensive project for a new naval arsenal at Northfleet, but a committee of engineers and others being appointed to report on the possibility of improving this station, among whom were Watt, Huddart, and Jessop, their plan was afterwards examined, and some improvements suggested in it by Mr. Rennie. The first stone of a new establishment was laid on the 19th of August, 1814. This plan embraced the addition of nineteen acres to the area of the dock-yard, on the west shore of the Medway; the construction of a wet-dock or basin 520 feet long by 300 feet in width, entered by a lock from the Medway; the erection of three dry-docks on the east side of this basin; the enclosure of Major's marsh, as a further addition of ten to twelve acres of area; and the construction of store and mast houses, mast-ponds, a smithery, governor's and officers' houses, as at the other royal yards. The whole area of the new yard is about fifty acres.

We come, lastly, to the most ancient of our dock-yards, that at *Woolwich*. This occupies a frontage to the Thames 3300 feet; the breadth extends irregularly from 250 to 750 feet: the whole enclosed area being about thirty-six acres. It has five slips, which open into the river, three of which are for ships of the line, one for frigates, and one for small vessels. It has likewise three dry-docks, one double and one single dock; all of these are capable of receiving ships of the line.

Woolwich yard has produced some of the largest and finest ships in the navy, and is chiefly important as a building yard; but of late years the increasing shallowness of the river, and the immense accumulation of mud, which is often found in a few weeks to block up all the entrances into the docks and slips, has much injured it. In the Eighth Report of the Select Committee on Finance (1818) it is stated, that 'the wharf wall at Woolwich, owing to the action of the tide on the foundation, is in a falling state, and in danger of being swept into the river, it being secured only in a temporary manner, and requiring to be immediately rebuilt in a direction that will preserve it from similar injury hereafter.' This re-

commendation has been acted upon; but the works are as yet, we believe, incomplete.

The new mast-houses and mast-slip, the new mast-ponds, and the houses here for stowing yards, topmasts, &c., with the locks under them, are all excellent. The timber births are also well arranged, and the addition lately made to the western extremity of the yard will allow the stacking and classing of several thousand loads of timber.

The present situation of the ropery, at a distance from the yard, is very inconvenient: but it is of good dimensions, being 180 fathoms long, and having store room for 2000 tons of hemp and 6000 barrels of pitch and tar. The process of tarring, or passing the yarns through heated tar, and then drawing them through apertures in an iron plate, is here performed by four horses. The laying of a cable of twenty-two or twenty-three inches is performed by the labor of 170 or 180 men, and requires upwards of an hour of the most severe exertion of strength, especially on the part of those who are stationed at the cranks. Woolwich dock-yard is pretty complete in its work-shops, store-cabins, offices for the clerks, houses and gardens for the commissioner and principal officers. The number of men employed during the war amounted to about 1800, of whom nearly 1100 were shipwrights and artificers. The spinners, knitters, layers, laborers, &c., in the ropery, were about 260. Upwards of twenty teams of horses were also employed here daily.

Henry VIII. first established a royal dock-yard at Woolwich; where it appears that the Harry Grace de Dieu, of 1000 tons, was built in 1512. This ship is stated to have been in length 128 feet, and in breadth forty-eight feet: she had three flush decks, a forecastle, half-deck, quarter-deck, and round-house, and carried 176 pieces of ordnance: she had eleven anchors, the largest of which weighed 4400lbs. M. Dupin, who regarded all our establishments with the eye both of a man of science and of a jealous rival, says of our present ship-building: 'The English ships of war, with all the improvements which we have just made known, are superior to French ships of war, 1st. As fabrics that are solid, durable, and, as preserving their form, nearly unchangeable; 2d. As military machines, without any weak points, being capable, within the same space, to discharge a mass of fire much more considerable; and nevertheless to exercise more at ease this accumulated artillery; 3d. As habitable fabrics. They have banished from these ships of war the fantastical mixture of mean and highly finished ornaments, of a species of decoration more suited for dwelling houses, and fit only to degrade the austere beauties of naval architecture. They have banished all those refinements of bad taste; refinements which always produced a most miserable effect, which, nevertheless, giving to the exterior an air of luxury and magnificence, encourage naval officers to expend in the interior a still greater degree of luxury; in short, which pervert from its purpose a floating fortress, by changing it into a furnished hotel, supported at a great expense to the nation.' tom. i. p. 165.

The officers of an established dock-yard are, 1. The commissioner. 2. The master attendant. 3. The master shipwright. 4. The clerk of the check. 5. The store-keeper. 6. The clerk of the survey; to which have recently been added the subordinate officers of timber-master, and the master measurer. There are besides several assistants to the master attendant and master shipwright, foremen, sub-measurers, quartermen, and converters, surgeon, chaplain, boatswain, warden, &c. The establishment at Portsmouth, which will convey an idea of the others, consisted, at the close of the war, of—

1. The commissioner, having a salary of £1100 a year (all others £1000); three clerks with salaries from £400 to £120.

2. Two masters attendant, one at £650, the other at £500 a year; one clerk to both.

3. Master shipwright, £720 a year; three clerks from £300 to £120.

4. Clerk of the check, salary £600; eight clerks from £400 to £80.

5. Storekeeper, salary £600 a year; twelve clerks from £400 to £80.

6. Clerk of the survey, £500; eight clerks from £400 to £80.

7. Clerk of the rope-yard, £350; one clerk.

8. Engineer and mechanist, £600 (at Portsmouth only), with a draughtsman; one clerk.

9. Timber-master, salary £500; seven clerks from £250 to £80.

10. Three assistants to the master attendant at £220 each; one assistant to the timber-master, £200; three assistants to the master shipwright, £400 each.

11. The master-measurer, £250 a year; ten clerks from £200 to £80.

12. Thirty-five foremen, from £250 to £80 each.

13. Sub-measurers, quartermen, and converters, from £180 to £160 each.

14. The master mast-maker, sail-maker, boat-builder, joiner, house carpenter, bricklayer, smith, rope-maker, rigger, painter (wood-mills, metal-mills, mill-wright, at Portsmouth only); with salaries each, from £260 to £200 a year.

15. Twenty-two cabin-keepers from £100 to £60 each.

16. A surgeon, £500; assistant, £200.

17. Chaplain, £500.

18. Boatswain, £250.

19. Warden of the gate, £200.

Watchmen, warders, and rounders.

The total amount of the salaries paid to the above mentioned officers in the year 1817, in Portsmouth yard alone, was £50,065. 5*s*.—*Estimates of the Ordinary of the Navy*, 1817.

According to the above estimates the expenses of the principal of these establishments in 1817. were as follow:

Deptford dock-yard .	£27,582	0	0
Woolwich ditto . .	32,440	12	0
Chatham ditto . .	36,883	10	4
Sheerness ditto . .	26,659	6	0
Portsmouth ditto . .	59,969	5	0
Plymouth ditto . .	45,299	13	0

See NAVY.

DOCKUM, a town of the Netherlands, in Friesland, seated at the mouth of a canal which

at high water brings up large vessels. It has a good harbour, built in 1248, by Ubbo, duke of Friesland. The town is very well built, and fortified by ramparts and bastions. It is ten miles north-east of Lewarden, and thirty-three west of Deltzyl. Population 3100. The trade is in salt, cheese, and butter.

DOCTOR, *n. s.* & *v. a.* }
DOC'TORAL, *adj.* }
DOC'TORALLY, *adv.* } Fr. *docteur*; Sp. and Port. *dotor*; Ital. *dottore*; Lat. *doctor*, from *doceo*, to teach. See DOCILE.
DOC'TORATE, *n. s.* }
DOC'TORSHIP. }

He who teaches in any faculty; hence, one who has taken a high degree in the learned professions, and is an able or skilful man, generally. The verb is a low word derived from the noun. Doctorate and doctorship are the degree or rank of a doctor.

And prophetis and *doctouris* weren in the churche that was at Antioche. *Wiclif. Dedis.* 13.

No woman had it, but a civil *doctor*,
Who did refuse three thousand ducats of me,
And begged the ring.
Shakspeare. Merchant of Venice.

By medicine life may be prolonged, yet death
Will seize the *doctor* too. *Id. Cymbeline.*

Changing hands without changing measures, as if a drunkard in a dropsy should change his *doctors*, and not his diet. *Saville.*

The physicians resorted to him to touch his pulse, and consider of his disease *doctorally* at their departure. *Hakewill.*

From a scholar he became a fellow, and then the president of the college, after he had received all the graces and degrees, the proctorship and the *doctorship*. *Clarendon.*

Then subtle *doctors* scriptures made their pride,
Casuists, like cocks, struck out each other's eyes.
Denham.

To 'pothecaries let the learned prescribe,
That men may die without a double bribe;
Let them but under their superiors kill,
When *doctors* first have signed the bloody bill.
Dryden.

He that can cure by recreation, and make pleasure the vehicle of health, is a *doctor* at it in good earnest *Collier.*

In truth, nine parts in ten of those who recovered, owed their lives to the strength of nature and a good constitution, while such one happened to be the *doctor*. *Swift.*

I thank you, my dear Lord, for your congratulations on my advancement to the *doctorate*; though I doubt it will seem a little incongruous in me to combat the scarlet whore in her own vestments. *Bp. Hurd.*

DOCTOR, Διδασκαλος, in the Greek church, is a particular officer appointed to interpret part of the Scriptures: he who interprets the gospels is called doctor of the gospels; he who interprets St. Paul's epistles doctor of the apostle; he who interprets the psalms doctor of the psalter.

DOCTOR is also an appellation adjoined to several specific epithets, expressing the merit of some of the schoolmen: thus, Alexander Hales is called the irrefragable doctor; Thomas Aquinas, the angelic doctor; St. Bonaventure, the seraphic doctor; John Duns Scotus, the subtle doctor; Raimond Lully, the illuminated doctor; Roger Bacon, the admirable doctor, &c.

DOCTOR OF THE CHURCH, a title given to certain fathers whose doctrines and opinions have been the most generally followed and authorised. Of these there are four of the Greek church, and three of the Latin. The first are St. Athanasius, St. Basil, St. Gregory Nazianzen, and St. Chrysostom. The latter are St. Jerome, St. Augustine, and Gregory the Great. In the Roman breviary there is a particular office for the doctors. It only differs from that of the confessors, by the anthem of the Magnificat, and the lessons.

DOCTOR OF THE LAW, a title of honor among the Jews. The investiture of this order was performed by putting a key and table book in their hands; which is what some authors imagine our Saviour alluded to, when, speaking of the doctors of the law (Luke xi. 52), he says, 'Woe unto you doctors of the law, for you have taken away the key of knowledge: you entered not in yourselves, and them that were entering you hindered.'

The establishment of the doctorate, such as now in use among us, is ordinarily attributed to Irnerius, who himself drew up the formulary. The first ceremony of this kind was performed at Bologna, in the person of Bulgarus, who began to profess the Roman law, and on that occasion was solemnly promoted to the doctorate, i. e. installed juris utriusque doctor. But the custom was soon transferred from the faculty of law to that of theology; the first instance whereof was given in the university of Paris, where Peter Lombard and Gilbert de la Portree, the two chief divines of those days, were created doctors in theology, sacræ theologiæ doctores. Spelman takes the title of doctor not to have commenced till after the publication of Lombard's sentences, about 1140, and affirms, that such as explained that work to their scholars were the first that had the appellation of doctors. Others go much higher, and hold Bede to have been the first doctor at Cambridge, and John de Beverly at Oxford, which last died A. D. 721. But Spelman will not allow doctor to have been the name of any title or degree in England, till the reign of king John, about 1207. By stat. 37, Hen. VIII. c. 17, sect. 4, a doctor of the civil law may exercise ecclesiastical jurisdiction, though a layman.

To pass D. D. at Oxford, it is necessary for the candidate to have been four years bachelor of divinity. For LL. D. he must have been seven years in the university; to commence LL. B. five years, after which he may be admitted doctor. Otherwise, in three years after taking the degree of M. A., he may take the degree of LL. B., and in four years more that of LL. D., which method and time are likewise required to obtain the degree of M. D. At Cambridge, to take the degree of D. D., it is requisite that the candidate have been seven years B. D., though in several of the colleges the taking of the bachelor's degree is dispensed with, and they may go out per saltum. To commence LL. D. the candidate must have been five years LL. B., or seven M. A. To pass M. D. he must have been five years B. D., or seven years M. A.

DOC'TRINE, *n. s.* } Fr. *doctrine;* Ital.
Doc'TRINAL, *adj.* & *n. s.* } Span. and Port.
Doc'TRINALLY, *adv.* } *dottrina;* Lat. *doctrina*, from *doceo*, *doctus*, to teach. See DOCILE. Principles or propositions taught; the act of teaching: doctrinal has been formerly used synonymously. As an adjective it signifies relating to, or containing doctrine; and doctrinally is the corresponding adverb.

Whiche thingis we speken also not in wise wordis of manny's wisdom, but in the *doctrine* of the spyryt, and maken a liknesse of spyritual thingis to goostli men. *Wiclif.* 1 Cor. ii.

He said unto them in his *doctrine*. *Mark* iv.

To make new articles of faith and *doctrine*, no man thinketh it lawful: new laws of government, what church or commonwealth is there which maketh not, either at one time or other? *Hooker.*

What special property or quality is that, which, being no where found but in sermons, maketh them effectual to save souls, and leaveth all other *doctrinal* means besides destitute of vital efficacy? *Id.*

Humility is a virtue all preach, none practise, and yet every body is content to hear. The master thinks it good *doctrine* for his servant, the laity for the clergy, and the clergy for the laity. *Selden.*

Not such as assent to every word in scripture, can be said in *doctrinals* to deny Christ. *South.*

Scripture accommodates itself to common opinions, and employs the usual forms of speech, without delivering any thing *doctrinally* concerning these points. *Ray.*

Ye are the sons of clergy, who bring all their *doctrines* fairly to the light, and invite men with freedom to examine them. *Atterbury.*

That great principle in natural philosophy is the *doctrine* of gravitation, or mutual tendency of bodies toward each other.
Watts's Improvement of the Mind.

Spirits and *doctrines* therefore may be considered, the latter word as explanatory of the former: and error sometimes signifying idolatry, erroneous *doctrines* may comprehend idolatrous, as well as false *doctrines*. *Bp. Newton.*

DOC'UMENT, *n. s.* } Fr. *document*; Ital.
DOCUMENT'AL, *adj.* } Span. and Port. *documento;* Lat. *documentum*, from *doceo*, *docui*, to teach. The thing taught: precept; instruction. Hence written evidence in law.

It is a most necessary instruction and *document* for them, that as their majesty made them dispensators of her favour, so it behoveth them to shew themselves equal distributors. *Bacon.*

It is not unnecessary to digest the *documents* of cracking authors into several classes.
Harvey on Consumption.

Gentle insinuations pierce, as oil is the most penetrating of all liquors; but in magisterial *documents* men think themselves attached, and stand upon their guard.
Government of the Tongue.

Learners should not be too much crowded with a heap or multitude of *documents* or ideas at one time.
Watts.

DOD (John), a puritan divine, was born at Shotledge in Cheshire, in 1547. He became fellow of Jesus College, Cambridge, and was appointed minister of Hanwell, in Oxfordshire; whence he removed to Fenny Compton, and to Cannons Ashby, in Northamptonshire. In 1624 he was presented to the living of Fawsley, in the same county, where he died in 1645. He wrote, 1. An Exposition of the Commandments, 4to., which work procured him the name of the Decalogist; 2. An Exposition of the Book of Proverbs, 4to.

DODART (Denis), a regent of the faculty of medicine at Paris, was born in that city in 1634. He had an exquisite taste for music and painting, was in high esteem at court as a physician, and a member of the Academy of Sciences. He wrote Memoires pour servir a l'Histoire de Plantes; and a curious work, entitled Medicina Statica Gallica. He died in 1707. His son, Claude John Baptiste Dodart, became physician to Louis XV., and died in 1730.

DODARTIA, in botany, a genus of the angiospermia order, and didynamia class of plants; natural order fortieth, personatæ: CAL. quinquedentated: COR. under lip twice as long as the upper: CAPS. bilocular and globose. Species two, natives of Palestine.

DODBROOK, a market town and parish of Devonshire, fifteen miles south-west from Dartmouth, and 207 W.S.W. from London. It is noted as being the first place where white ale was brewed, of which the rector claims tythe; but in lieu thereof receives 10*d.* from each innkeeper. Market, third Wednesday in every month.

DODD (Charles), a Roman catholic priest, at Harvington in Worcestershire, where he died in 1745. He wrote The Church History of England, 3 vols. folio, printed at Brussels, from 1737 to 1742.

DODD, (Dr. William), an unfortunate English divine, born in 1729. He was sent in 1745, at the age of sixteen, to the university of Cambridge. In 1749 or 1750 he took the degree of B. A. with considerable honor. Leaving the university, he married in 1751; was ordained a deacon the same year; priest in 1753, and soon became a celebrated preacher. His first preferment was the lectureship of West-Ham. In 1754 he was also chosen lecturer of St. Olave's, Hart-Street; and in 1757 took the degree of M. A. at Cambridge. On the establishment of the Magdalen Hospital in 1758, he was a strenuous supporter of that charity, and soon after became preacher at the chapel. By the patronage of bishop Squire, he, in 1663, obtained a prebend of Brecon, and, by the interest of some city friends, was appointed one of the king's chaplains; soon after which he had the care of the education of the earl of Chesterfield. In 1766 he went to Cambridge and took the degree of LL. D. Impatient for further advancement, he adopted measures which eventually terminated in his ruin. On the living of St. George, Hanover Square, becoming vacant, he wrote an anonymous letter to the lord chancellor's lady, offering 3000 guineas if by her assistance he was promoted to it. This being traced to him, complaint was immediately made to the king, and Dr. Dodd was dismissed with disgrace from his office of chaplain. From this period he lived neglected, if not despised; and his extravagance still con-

tinuing, he became involved in difficulties, which tempted him to forge a bond from his late pupil lord Chesterfield, February 4th, 1777, for £4200, which he actually received; but, being detected, was tried at the Old Bailey, found guilty, and received sentence of death. Notwithstanding numerous and, we believe, unprecedented applications for mercy, he was executed at Tyburn, June 27th, 1777. Dr. Dodd was a voluminous writer and compiler. He published a Commentary on the Bible, 3 vols. folio; Sermons to Young Men, 3 vols. 12mo.; Reflections on Death, 12mo.; The Visitor, a periodical paper, 2 vols. 12mo.; Sermons on the Miracles and Parables, 4 vols. 8vo.; Several Poems and Miscellaneous Pieces; and lastly, he left for the press Thoughts in Prison.

DOD'DER, *n. s.* & *v. a.* } According to
DOD'DERED, *adj.* } Skinner from Dut. *touteren*, to shoot up; but Mr. Thomson says from Goth. *daudi;* Teut. *todter*, the slayer, because injurious to corn and flax. A plant. See the extract from Hill. The verb is derived from the noun. Doddered is overspread; dodder, excrescencies.

The peasants were enjoined
Sere-wood, and firs, and *doddered* oaks to find.
Dryden's Fables.

Near the hearth a laurel grew,
Doddered with age, whose boughs encompass round
The household gods, and shade the holy ground.
Dryden's Æneid.

Dodder is a singular plant: when it first shoots from the seed it has little roots, which pierce the earth near the roots of other plants; but the capillaments of which it is formed soon after clinging about these plants, the roots wither away. From this time it propagates itself along the stalks of the plant, entangling itself about them. It has no leaves, but consists of capillaments or stalks, brownish with a cast of red, which run to great lengths. They have tubercles, which fix them fast down to the plant, and by means of which they absorb the juices destined for its nourishment. *Hill.*

DODDRIDGE (Philip), D. D., an eminent Independent minister, born in London, 1702. Having completed the study of the classics, he was, in 1719, placed under the tuition of the Rev. John Jennings, who kept an academy at Kibworth in Leicestershire. He was first settled as a minister at Kibworth, where he preached to a small congregation of the Independent persuasion; but, on Mr. Jennings's death, succeeded to the care of his academy; and soon after was chosen minister by a large congregation at Northampton, to which he removed, and where the number of his pupils increased. He instructed them with the freedom and tenderness of a father; and never desired that they should blindly follow his sentiments. He checked every appearance of bigotry and uncharitableness. Yet while thus liberal to the opinions of others, he refused a very handsome offer of patronage made him by the duchess of Bedford, on condition of entering the church of England. He died at Lisbon, whither he went for the recovery of his health, in 1751. He wrote, 1. Free Thoughts on the most probable means of reviving the Dissenting Interest; 2. The Life of Colonel James Gardiner; 3. Sermons on the Education of Children; 4. The Rise and Progress of Religion in the Soul; 5. The Family Expositor, in 6 vols. 4to., &c.; of which several of the prelates of the church have spoken highly. Among others, the late bishop of Durham observes:—'In reading the New Testament, I recommend Doddridge's Family Expositor, as an impartial interpreter, and faithful monitor. Other expositions and commentaries might be mentioned greatly to the honor of their respective authors, for their several excellencies; such as, elegance of composition, acuteness of illustration, and copiousness of erudition: but I know of no expositor, who unites so many advantages as Doddridge; whether you regard the solidity of his version, the fulness and perspicuity of his composition, the utility of his general and historical information, the impartiality of his doctrinal comments, or, lastly, the piety and pastoral earnestness of his moral and religious applications.' Since the author's death a volume of his Hymns has been published, and his Theological Lectures. Several of his works have been translated into Dutch, German, and French.

DODE'CAGON, *n. s.* Δωδεκα and γωνια. A figure of twelve sides

DODECAGON, a regular polygon of twelve equal sides and angles. If the side of a dodecagon be 1, its area will be equal to 3 times the tan. of $75° = 3 \times 2 + \sqrt{3} = 11{\cdot}1961524$ nearly; and, the areas of plane figures being as the squares of their sides, therefore 11·1961524 multiplied by the square of the side of any dodecagon, will give its area.

DODECAGYNIA; from δωδεκα, twelve, and γυνη, a woman; the fifth order in the class dodecandria; consisting of plants, which, along with the general characteristics of the class, have twelve female organs. See BOTANY.

DODECAHEDRON, in geometry, one of the Platonic bodies, or regular solids, contained under twelve equal and regular pentagons.

DODECANDRIA; from δωδεκα, twelve, and ανηρ, a man; the eleventh class in Linnæus's sexual system, consisting of plants with hermaphrodite flowers, that have twelve male organs. It is not, however, limited to this number. Many genera have sixteen, eighteen, and even nineteen stamina. The essential character is, that the stamina, however numerous, are inserted into the receptacle. See BOTANY.

DODECAS, in botany, a genus of the trigynia order, and dodecandria class of plants: CAL. half quadrifid, having the corolla above: COR. quinquefid: CAPS. unilocular, conjoined with the calyx. Species one only, a Surinam shrub.

DEDECATEMO'RION, *n. s.* Δωδεκατημοριον. The twelfth part.

'Tis *dodecatemorion* thus described:
Thrice ten degrees, which every sign contains,
Let twelve exhaust, that not one part remains;
It follows streight, that every twelfth confines
Two whole and one half portion of the signs.
Creech.

DODECATHEON, in botany, meadia; a genus of the monogynia order, and pentandria class of plants; natural order twenty-first, preciæ:

COR. verticillated and reflexed: STAM. placed in the tube: CAPS. unilocular and oblong. Species one only, a native of Virginia, with leaves like a lettuce, but bearing beautiful flowers somewhat resembling a cowslip.

DODGE, *v. n.* Dr. Johnson says from a corruption of dog, but more probably from Teut. *ducken*, *dongen*, to conceal. To deal craftily; shift place so as to hide; treat capriciously.

[Pharaoh] never prays for himself, but carelessly wills Moses and Aaron to pray for him; never yields God his whole demand, but higgleth and *dodgeth*, like some hard chapman that would get a release with the cheapest. *Bp. Hall. Contemplations.*

If in good offices and due retributions we may not be pinching and niggardly, it argues an earthly and ignoble mind, where we have apparently wronged, to higgle and *dodge* in the amends.
Hale's Contemplations.

For he had, any time this ten years full,
Dodged with him betwixt Cambridge and the Bull.
Milton.

The consideration should make men grow weary of *dodging* and shewing tricks with God. *South.*

You know my passion for Martha, and what a dance she has led me; she *dodged* with me above thirty years.
Addison.

The chaffering with dissenters, and *dodging* about this or t'other ceremony, is but like opening a few wickets, and leaving them a-jar, by which no more than one can get in at a time. *Swift.*

DO'DKIN, *n. s.* Dut. *duytken*. A doitkin or little doit; a contemptuous name for a low coin.

I would not buy them for a *dodkin*.
Lily's Grammar Construed.

DO'DMAN, *n. s.* The name of a fish.

Fish that cast their shell are the lobster, the crab, the craw-fish, the hodmandod or *dodman*, and the tortoise. *Bacon.*

DODO, in ornithology. See DIDUS.

DODONA, a town of Thesprotia in Epirus, or, as some say, in Thessaly. There was in its neighbourhood a celebrated oracle of Jupiter. The town and temple of the god were first built by Deucalion, after the general deluge. It was supposed to be the most ancient oracle of all Greece; and according to the traditions of the Egyptians, mentioned by Herodotus, it was founded in consequence of an oracular message by a dove. Two black doves, he says, took their flight from the city of Thebes in Egypt; one of which flew to the temple of Jupiter Ammon, and the other to Dodona, where with a human voice they acquainted the inhabitants that Jupiter had consecrated the ground, which in future would give oracles. The extensive grove which surrounded Jupiter's temple was endowed with the gift of prophecy; and oracles were frequently delivered by the sacred oaks, and the doves which inhabited the place. This fabulous tradition of the oracular power of the doves is explained by Herodotus, who says, that some Phœnicians carried away two priestesses from Egypt, one of whom went to fix her residence at Dodona. The fable might also have been founded on the double meaning of the word τελειαι, which signifies doves in most parts of Greece, while in the dialect of the Epirots it implies old women. In ancient times the oracles were delivered by the murmuring of a neighbouring fountain; but the custom was afterwards changed. Large kettles were suspended in the air near a brazen statue, which held a lash in its hand. When the wind blew strong, the statue was agitated, and struck against one of the kettles, which communicated the motion to all the rest, and raised the clattering and discordant din, which continued for a while, and from which the artifice of the priests drew the predictions. The ship Argo was built with wood of the oaks of Dodona, and some of the beams, it is said, gave oracles to the Argonauts, and warned them against the approach of calamity. Within the forest of Dodona there was a miraculous stream, and a fountain of cool water, which had the power of lighting a torch as soon as it touched it. This fountain was totally dry at noon-day, and was restored to its full course at midnight, from which time till the following noon it began to decrease, and at the usual hour was again deprived of its waters. The oracles of Dodona were generally delivered by women. No traces of this town have been discovered in modern times; but in Mount Tomarus, there is a forest of vast extent, spreading far to the westward, which seems to answer to the site. In the higher parts, where the oak does not thrive, there are immense ranges of pines and firs. Dr. Holland, one of the latest travellers in Albania, when describing the city of Ioannina, enters into the long controverted point of the site of Dodona, which he endeavours to fix between Thesprotia and Molossia. Strabo distinctly says, that it belonged at first to the Thesprotians, and afterwards to the Molossians. And we are not aware of its having been assigned by any writers of the same era to these two different nations at the same time. It is singular that Dr. Holland should have overlooked one proof of the opinion supported by him, as it occurs in the very passage of Æschylus, to which he refers in the note to p. 143. Æschylus speaks of Io going to the Molossian plains and the temple of Thesprotian Jove.

ἐπεὶ γὰρ ἦλθες πρὸς Μολοσσὰ γάπεδα,
τὴν αἱπύνωτόν τ' ἀμθὶ Δωδώνην, ἵνα
μαντεῖα θᾶκός τ' ἠστὶ Θεσπρωτοῦ Διὸς,
τερας τ' ἄπιστον, αἱ προσήγοροι δρύες.
Prom. 854—857.

DODONÆUS, DODONIAN, in antiquity, an epithet given to Jupiter, because he was worshipped in a temple built in the forest of Dodona. Dodonides were the priestesses who gave oracles at this temple.

DODSLEY (Robert), an eminent bookseller, and ingenious writer, born at Mansfield in Nottinghamshire in 1703. He was originally a livery servant, but his natural genius, and early passion for reading, soon elevated him to a superior station. He wrote an elegant satirical farce called The Toy Shop, which was acted with great applause in 1735, and which recommended him to the patronage of Pope. The following year he produced the King and Miller of Mansfield. The profits of these two farces enabled him to commence bookseller, and his own merit procured him eminence in that pro-

fession. He wrote some other dramatic pieces, and published a collection of his works in one vol. 8vo., under the modest title of Trifles; which was followed by Public Virtue, a poem, in 4to.; he also collected several volumes of well-chosen Miscellaneous Poems and Fugitive Pieces, whose brevity would otherwise have endangered their being totally lost to posterity. He was also the original publisher of the Annual Register, of which Burke was the editor; and he first projected the English Dictionary of Dr. Johnson. He died in 1764.

DODWELL (Henry), a learned controversial writer, born at Dublin in the year 1641. He wrote a great number of tracts; but bishop Burnet and others accuse him of doing injury to Christianity, by his indiscreet love of paradoxes and novelties, and thus exposing himself to the scoffs of unbelievers. His pamphlet, On the Immortality of the Soul, gave rise to the well-known controversy between Mr. Collins and Dr. Clark on that subject. He died in 1711.

DOE, *n. s.* From Sax. ᵭa; Dan. *daa;* Lat. *dama.* A she deer; the female of a buck.

Then but forbear your food a little while,
While, like a *doe*, I go to find my fawn,
And give it food. *Shakspeare. As You Like It.*

Bucks have horns, *does* none.
Bacon's Natural History.

The fearful *doe*
And flying stag amidst the greyhounds go.
Dryden's Virgil.

DOE, in zoology. See CERVUS.

DOES (Jacob Vender), a painter, born at Amsterdam in 1623, died in 1673. He studied at Rome, where he followed the manner of Bamboccio. His landscapes are dark, but fine, and the figures beautifully executed. He had two sons, Jacob and Simon, both good artists; the first of whom died in 1693, the latter in 1717.

DOFF, *v. a.* From *do off.* To put off dress; to shift: divest; delay.

You have deceived our trust,
And made us *doff* our easy robes of peace,
To crush our old limbs in ungentle steel.
Shakspeare. Henry IV.

Your eye in Scotland
Would create soldiers, and make women fight,
To *doff* their dire distresses. *Id. Macbeth.*

Every day thou *doffest* me with some device, Iago.
Id. Othello.

Nature, in awe to him,
Hath *doffed* her gaudy trim,
With her great master so to sympathize.
Milton.

That judge is hot, and *doffs* his gown.
Dryden's Juvenal.

Alcides *doffs* the lion's tawny hide. *Rowe.*

Why art thou troubled, Herod? What vain fear
Thy blood-revolving breast doth move?
Heaven's king, who *doffs* himself our flesh to wear,
Comes not to rule in wrath, but serve in love.
Crashaw.

Could they *doff*
Their hose as they have *doffed* their hats, 'twould be
A blessing, as a mark the less for plunder.
But let them fly, the crimson kennels now
Will not much stain their stockings, since the mire
Is of the self-same purple hue. *Byron.*

DOFREFIELD, or DOFRINE, the highest peak of the mountains which divide Norway from Sweden. King Christian V. rode over it in 1686, while his attendants only ventured to go on foot. He was saluted with nine pieces of cannon by general Webe; and erected a pyramid on the peak, in memory of the exploit.

DOG, *n. s.* & *v. a.*
DOG-BANE, *n. s.*
DOG-BER'RY,
DOG-BOLT,
DOG-BRIAR,
DOG-CHEAP,
DOG-DAYS,
DOG-DRAW,
DOG-FISH,
DOG-FISHER,
DOG-FLY,
DOGGED, *adj.*
DOGGEDLY, *adv.*
DOGGEDNESS, *n. s.*
DOGGISH, *adj.*
DOG-HEARTED, *adj.*
DOG-HOLE, *n. s.*
DOG-KENNEL,
DOG-LOUSE,
DOG-ROSE,
DOG-SLEEP,
DOG-STAR,
DOG-TEETH,
DOG-TRICK,
DOG-TROT,
DOG-WEARY,
DOG-WOOD,
DOG'S-MEAT.

Fr. *dogue;* Dutch *dogghe;* Teut. *dagghe,* according to Minsheu, from Belg. *ducken,* to shut up, because dogs are shut up in the day-time, or from Gr. δακος, a biter. See the article. A name of contempt for man. As a verb it signifies to watch or hunt as a dog does. Dog-bane, dog-berry, dog-briar, dog-rose, and dog-wood are plants; dog-bolt is a coarse fellow, as Dr. Johnson thinks, from the coarser part of flour having been called dog-bolt; dog-cheap, cheap as the food of dogs; dog-days begin when the dog-star rises and sits with the sun; a dog-draw is, says Cowell, a manifest deprehension of an offender against venison in the forest, when he is found drawing after a deer by the scent of a hound which he leads in his hand. Dog-fish is another name for the shark; dog-fisher another and small, but voracious fish; dog-fly a voracious fly. Dogged and doggish is morose, ill-tempered, surly; and doggedly and doggedness the corresponding adverb and substantive; dog-hearted is doggish; dog-hole a mean hole or habitation, sometimes not equalling that of the dog, or a dog-kennel: dog-louse a louse that is frequently found on the dog: dog-sleep, pretended sleep: dog-star, Sirius, the star that gives name to the dog-days, once reckoned unhealthy: dog-teeth are those teeth next the grinders, which resemble the dog's: dog-trick is a mischievous or ill turn: dog-trot a gentle trot, like that of a dog: dog-weary, excessively weary: dogs'-meat, a refuse, offal.

Beware of *dogs,* beware of evil workers
Phil. iii. 2.

She bringeth me the grete clobbed staves,
And cryeth, slee the *dogges* everich on,
And breke hem bothe bak and every bon.
Chaucer. Cant. Tales.

I never heard a passion so confused,
So strange, outrageous, and so variable,
As the *dog* Jew did utter in the streets.
Shakspeare.

I have *dogged* him like his murtherer. *Id.*

Your uncle must not know but you are dead;
I'll fill these *dogged* spies with false reports.
Id. King John.

His unkindness,
That stript her from his benediction, turned her
To foreign casualties, gave her dear rights
To his *doghearted* daughters. *Id. King Lear.*

Such smiling rogues as these sooth every passion
Renege, affirm, and turn their halcyon beaks
With every gale and vary of their masters,
As knowing nought, like *dogs*, but following. *Id.*

France is a *doghole*, and it no more merits the tread of a man's foot: to the wars. *Id.*

Oh, master, master, I have watched so long,
That I'm *dogweary*. *Id. Taming of the Shrew.*

Sorrow *dogging* sin,
Afflictions sorted. *Herbert.*

I fear the dread events that *dog* them both,
Lest some ill-greeting touch attempt the person
Of our renowned sister. *Milton.*

Few miles on horseback had they jogged,
But fortune unto them turned *dogged*.
Hudibras.

His only solace was, that now
His *dogbolt* fortune was so low,
That either it must quickly end,
Or turn about again, and mend. *Id.*

This said, they both advanced, and rode
A *dogtrot* through the bawling crowd. *Id.*

Behold an Egyptian in the skin of an Hebrew! How *dogged* an answer doth Moses receive to so gentle a reproof! *Bp. Hall Contemplations.*

Nor was it more in his power to be without promotion and titles, than for a healthy man to sit in the sun, in the brightost *dog-days*, and remain without warmth. *Clarendon.*

The *dog-fisher* is good against the falling sickness. *Walton.*

These spiritual joys are *dogged* by no sad sequels. *Glanville.*

The same ill taste of sense will serve to join
Dog foxes in the yoke, and sheer the swine.
Dryden.

But could you be content to bid adieu
To the dear playhouse, and the players too,
Sweet country seats are purchased every where,
With land and gardens, at less price than here
You hire a darksome *doghole* by the year.
Id. Juvenal.

Good store of harlots, say you, and *dogcheap*. *Id.*

A certain nobleman beginning with a *dogkennel*, never lived to finish the palace he had contrived. *Id.*

His reverence bought of me the flower of all the market; these are but *dogsmeat* to 'em. *Dryden.*

Learn better manners, or I shall serve you a *dog-trick*; I'll make you know your rider.
Dryden's Don Sebastian.

Why should we not think a watch and pistol as distinct species one from another, as a horse and a *dog*? *Locke.*

Of the rough or hairy excrescence, those on the briar, or *dogrose*, are a good instance.
Derham's Physico-Theology.

Thump-buckler Mars began,
And at Minerva with a lance of brass he head-long ran;
These vile words ushering his blows, Thou *dog-fly*, what's the cause
Thou makest gods fight thus? *Chapman's Iliad.*

I am desired to recommend a *dogkennel* to any that shall want a pack. *Tatler.*

Juvenal indeed mentions a drowsy husband, who raised an estate by snoring; but then he is represented to have slept what the common people call *dog-sleep*. *Addison.*

All shun the raging *dog-star's* sultry heat,
And from the half-unpeopled town retreat. *Id.*

It is part of the jaw of a shark or *dog-fish*.
Woodward.

The best instruments for dividing of herbs are incisor-teeth; for cracking of hard substances, as bones and nuts, grinders or mill-teeth; for dividing of flesh, sharp-pointed or *dog-teeth*. *Arbuthnot on Aliments.*

Had whole Colepeper's wealth been hops and hogs,
Could he himself have sent it to the *dogs*? *Pope.*

I have been pursued, *dogged* and way-laid through several nations, and even now scarce think myself secure. *Id.*

Reverse your ornaments and hang them all
On some patched *doghole* eked with ends of wall.
Id.

Hate *dogs* their rise, and insult mocks their fall.
Johnson. Vanity of Human Wishes.

Dog, in zoology, an animal remarkable for its natural docility, fidelity, and affection for its master; qualities which mankind are careful to improve for their own advantage. These useful creatures guard our houses, gardens, and cattle, with spirit and vigilance. By their help we are enabled to take not only beasts, but birds; and to pursue game both over land, and through the water. In some northern countries they draw sledges, and are also employed to carry burdens. In several parts of Africa and China dogs are eaten, as well as by the West Indian negroes, and accounted excellent food; and we have the testimony of Mr. Forster, that dog's flesh in taste exactly resembles mutton. They were also used as food by the Romans, and long before them by the Greeks, as we learn from several treatises of Hippocrates.

From the structure of the teeth, it is evident that the dog is a carnivorous animal. He is possessed of such strong digestive powers, as to draw nourishment from the hardest bones. When oppressed with sickness, to which he is very subject, especially in the beginning of summer, and before ill weather, in order to procure reachings, he eats the leaves of the quicken-grass, the bearded wheat-grass, or the rough cock's-foot grass, which give him immediate relief. His drink is water, which he takes in small quantities at a time, by lapping with his tongue. His excrements are generally hard scybals, which, especially after eating bones, are white, and were once in great repute as a drug; but are now justly disregarded.

The dog is an animal not only of quick motion, but remarkable for travelling very long journeys. He can easily keep up with his master either on foot or horseback for a whole day. When fatigued, he does not sweat, but lolls out his tongue. He lies generally on his breast, with his head turned to one side, and sometimes with his head above his two fore feet. He sleeps little, and even that does not seem to be very quiet; for he often starts, and seems to hear with more acuteness in sleep than when awake. He can trace his master by the smell of his feet in a church, or in the streets of a populous city. This sensation is not equally strong in every kind. The hound can trace game, or his master's steps, twenty-four hours afterwards. He barks more furiously the nearer he approaches

the fowls, unless he be trained to silence. The females admit the males before they are twelve months old. They remain in season ten, twelve, or even fifteen days, during which time they admit a variety of males. They come in season generally twice a-year, and more frequently in the cold than in the hot months. The female goes with young about nine weeks. They generally bring forth from six to twelve puppies. Those of a small size bring forth four or five, sometimes but two. The whelps are commonly blind, and cannot open their eyes till the tenth or twelfth day: the males resemble the dog, the females the bitch. In the fourth month, they lose some of their teeth, which are soon succeeded by others.

Buffon has given a genealogical table of all the known dogs, in which he makes the chien de berger, or shepherd's dog, the origin of the whole species, because it is naturally the most sensible. See plate, Dogs and Drains. This table is intended not only to exhibit the different kinds of dogs, but to give an idea of their varieties as arising from a degeneration in particular climates, and from a commixture of the different races. 'The chien de berger, or shepherd's dog,' says Buffon, 'is the root of the tree. This dog, when transported into Lapland, or other very cold climates, assumes an ugly appearance, and shrinks into a smaller size; but in Russia, Iceland, and Siberia, where the climate is less rigorous, and the people a little more advanced in civilisation, he seems to be better accomplished. These changes are occasioned solely by the influence of those climates, which produce no great alteration on the figure of this dog; for, in each of these climates his ears are erect, his hair thick and long, his aspect wild, and he barks less frequently, and in a different manner, than in more favorable climates, where he acquires a finer polish. The Iceland dog is the only one that has not his ears entirely erect; for their extremities are a little inclined; and Iceland, of all the northern regions, has been longest inhabited by half-civilised men. The shepherd's dog, when brought into temperate climates, and among a people perfectly civilised, as Britain, France, Germany, would, by the mere influence of the climate, lose his savage aspect, his erect ears, his rude, thick, long hair, and assume the figure of the bull-dog, the hound, and the Irish grey-hound. The bull-dog and the Irish grey-hound have their ears still partly erect, and very much resemble, both in their manners and sanguinary temper, the dog from which they derive their origin. The hound is farthest removed from the shepherd's dog; for his ears are long, and entirely pendulous. The gentleness, docility, and even timidity of the hound, are proofs of his great degeneration, or rather of the great perfection he has acquired by the long and careful education bestowed on him by man. The hound, the harrier, and the terrier, constitute but one race; for, it has been remarked, that in the same litter, hounds, harriers, and terriers, have been brought forth, though the female hound had been covered by only one of these three dogs. I have joined the common harrier to the Dalmatian dog, or harrier of Bengal, because they differ only in having more or fewer spots on their coat. I have also linked the turnspit, or terrier with crooked legs, with the common terrier; because the defect of the legs of the former has originally proceeded from a disease similar to the rickets, with which some individuals had been affected, and transmitted the deformity to their descendants.'

We shall now proceed to describe more particularly the principal varieties of this animal:—

1. The *Beagle*, the smallest hunting-dog used in this country, is chiefly employed in chasing the hare, and is remarkable for the melody of its tone. Huntsmen distinguish the rough and smooth beagle, but they are both the same species.

2. The *Bull-dog* derives its name from the barbarous diversion of bull-baiting in which it is used. It is of the mastiff kind, but is smaller with a somewhat flatter snout, the lower jaw projecting considerably beyond the upper one. Its aspect is very ferocious, and its courage and obstinacy in attacking the bull are well known. It generally seizes on the lip or other part of the face, pinning the bull, as it is called, to the ground, and maintaining its hold in spite of every effort of the animal to disengage himself. Goldsmith relates, that, at a bull-bait in the North of England, a young man wagered that his dog would attack the bull after his feet were cut off one by one. The cruel experiment was tried, and the dog seized the bull as eagerly as ever!

3. *Dalmatian*, or *Coach-dog*, is an animal of great beauty, being of a white color, elegantly marked on all parts with numerous round black spots. The native country of this breed is uncertain; it is commonly termed the Danish dog, and is usually kept by gentlemen as an attendant on the carriage.

4. *Greenland*, or *Kamtschatdale dog*. Dogs of this species have a long sharp nose, erect pointed ears, and a long tail, and are more like the shepherd's dog of various parts of Europe than any other. They are of different colors, and many of them curiously spotted. In summer they scratch a hole in the earth in which they lie, as being cooler, and in the winter they bury themselves in the snow in the same way, as a shelter from the frost. They can bear any degree of cold better than heat; and in spring, when the weather begins to be warm, they pant as if come off a long journey. As soon as these dogs can eat, their training begins. They are then tied to a stake, and plenteously fed with soup made of fish, by which means they grow stronger and larger than if suffered to be loose. A dark place or pit is considered best for their confinement, as this makes them timid, and afraid of surrounding objects, and they exert their strength more effectually to avoid them. All those designed for the draught are castrated, and have their tails cropped, and such as have large bones, a broad foot, a wide mouth, and are thick made at the back of the head and in the breast, are considered as the best adapted for work. Each dog has a particular name, as with us, which is of great use in driving them, as the whole set is managed by the voice, neither reins nor whip being used for this purpose. They are

fed on fish, which is given them in all possible forms; raw, dressed, dried, fresh, frozen, or putrid. After they are full grown they are suffered to range at large during the summer, as their services are not then wanted, and they provide their own food without any trouble to their owners. They frequent the shore, and lurk on the banks of the rivers, often standing up to the belly in water catching the fish, at which they snap with such a certain aim, that they seldom miss it if within reach. When the salmon ascend the rivers in great numbers, their food is abundant, and they only eat the heads, as being the finest flavored. In autumn, want of food obliges them to return to the dwellings of their masters, where they are tied up, that they may be ready for use when wanted. They are then very fat, so that a small piece of dried fish is all that is given them, and this very sparingly, that they may be the sooner fit for work, as a fat heavy dog is never a good traveller. They do not bark like the European dogs, but make a sort of howl, and at this season they express the most piteous lamentations day and night for the loss of their liberty. The villages generally consist of fifteen or twenty houses, each of which has at least six dogs belonging to it, and when one dog sets up a howl, all the rest immediately follow, and make the most horrible noise imaginable.

Six of these dogs are the usual number yoked to a sledge, and they are capable of drawing a weight of 600 or 700 pounds, at the rate of ten or twelve versts an hour; the best dogs, however, will often go fifteen versts or more, which is from eight to ten miles. With about half a dried or frozen fish given them in the morning, they will run sixty or eighty, and sometimes even a hundred versts a day; after which they are well fed. At other times food is very sparingly administered to them. The price of the common dogs is from thirty to forty rubles, but a good leader will sometimes sell for 100 rubles.

5. The *greyhound* is remarkable for the slenderness of its form, its elongated snout, and the extreme swiftness of its course. It is indeed esteemed the fleetest of all the hunting dogs, but, as it wants the faculty of scent, follows by the eye. Formerly, the greyhound was held in such esteem, that, by the laws of king Canute, it was enacted that no one under the degree of a gentleman should presume to keep one.

6. *Irish greyhound.* This is the largest of the dog kind, and in its appearance the most beautiful and majestic. The breed is peculiar to Ireland, where it was formerly of great use in destroying the wolves, with which that country was much infested, but is now extremely rare. These dogs are generally of a white or cinnamon color, and more robust than the greyhound, their aspect mild, and their disposition gentle and peaceable. It is said that their strength is so great, that in combat the mastiff or bull dog is far from being equal to them. They commonly seize their antagonists by the back, and shake them to death.

7. *Italian greyhound*, has the body arched and the snout tapering, but its size is only half that of the common greyhound. It is a beautiful and delicate animal, not common in this country, the climate being too cold.

8. *Harrier*, another of the hunting dogs, closely allied to the beagle, and like that kind comprehending several varieties. This is larger than the beagle, more nimble, and better adapted to endure the labor of the chase. In the pursuit of the hare it evinces the warmest ardor, and frequently outstrips the speed of the fleetest sportsman. A hybrid breed between this and the terrier, is sometimes kept for hunting the otter.

9. *Blood-hound* or *Sleuth* dog. This sort of hound was held in high request among our ancestors, and as it was remarkable for the most exquisite sense of smelling, was frequently employed in recovering game that had escaped from the hunter. It could follow, with great certainty, the footsteps of a man to a considerable distance, and was therefore of the utmost utility in those barbarous and uncivilised times, in tracing murderers and other felons through the most secret coverts. In many districts, infested with robbers, a certain number of these hounds were maintained at the public charge, and in general proved the means of discovering the perpetrators of crimes when every other endeavour failed of success. The breed of this kind of dog is not very generally cultivated at this time. Some few are kept for the pursuit of deer which have been previously wounded by a shot to draw blood, the scent of which enables the dog to pursue with the greatest certainty. During the American war numbers of them were sent to that country, and employed in discovering fugitives concealed in the woods and other secret places: they were in use also, for a similar purpose, during the late revolts in the West-India islands, and likewise in Ireland at the time of the last rebellion. They are sometimes employed in discovering deer-stealers, whom they infallibly trace by the blood that issues from the wounds of their victims. They are also said to be kept in convents situated in the lonely mountainous countries of Switzerland, both as a guard to the sacred mansions, and to find out the bodies of men who have been unfortunately lost in crossing those wild and dreary tracts.

10. *Old English hound* is distinguished by its great size and strength: the body is long, with a deep chest, its ears long and sweeping, and the tone of its voice peculiarly deep and mellow. It possesses the most exquisite sense of smelling, and can often discover the scent an hour after the beagles have given it up. Dogs of this kind were once common in Britain, and are said to have been formerly much larger than at present

11. *Fox-hound.* The breeding and training of this kind of dog is attended to with so much care in this country, that they are superior in strength, agility, and swiftness, to those of every other part of the world. It is affirmed, that the fox-hounds reared in this country lose much of their native vigor, on being transported into any other climate. In choosing these animals, such as stand high and appear light in their make are deemed preferable. The fox-hound is not limited to the pursuit of the fox only, but is instructed also to hunt the stag and other deer, and is found

equal to the most arduous contests of the chase. A chase of six or eight hours has been sustained by these hounds on many occasions; and in 1795, Merkin, a celebrated fox-hound bitch, was challenged to run any hound of her years, five miles over Newmarket, giving 220 yards, for 10,000 guineas, and as a run for trial, performed a race of four miles in seven minutes and a half.

12. *King Charles's* dog, a variety of the most elegant kind, and which is sufficiently known in this country under the appellation above-mentioned. The head is small and rounded, with the snout short, and the tail curved back; its ears are long, hair curled, and feet webbed. Its name is derived from its being a favorite of Charles II., who was always accompanied by some of these beautiful animals.

13. *Lion*-dog, an animal generally of small size, having the head and fore part of the body covered with shaggy hair, while the hind part is quite smooth, except a tuft at the end of the tail.

14. *Lurcher*, the usual attendant on the poacher, is a dog of smaller size than the greyhound, and stouter in proportion; its hair rough and commonly of a pale yellowish color, and the aspect of its visage remarkable for its sullenness. As this dog possesses the advantage of a fine scent, it is most commonly employed in killing hares and rabbits during the night-time. When turned into the warren it lurks about with the utmost precaution, and darts upon the rabbits, while feeding, without barking or making the least noise; and then conveys his booty in silence to his master.

15. *Maltese* dog, a variety with long soft and silky hair, appertaining to the spaniel kind, very small, and of a white color in general. This is one of the most elegant of the lap-dog kind, and in some varieties, as in the shock, is almost concealed in the hair which covers it from head to foot.

16. *Mastiff.* This is the size of a wolf, very robust in its form, and having the sides of the lips pendulous. Its aspect is sullen, its bark loud and terrific; and he appears every way formed for the important trust of guarding property committed to his care. As a house or yard dog, he may be perhaps more valuable than the Newfoundland breed, which is more commonly kept for this purpose. The mastiff, in its pure state, is seldom met with. The generality of dogs, distinguished by that name, are crossed breeds between the mastiff and bull-dog, or the ban-dog.

17. *Newfoundland* dog, a variety of large size, superior strength, sagacity, and docile disposition. The feet of this kind of dog are more palmated than usual, and the animal is remarkably partial to the water. The breed of Newfoundland dogs was originally brought from the country of which they bear the name, where they are extremely useful to the settlers on those coasts, who employ them as animals of burden, to bring wood from the interior of the country to the sea side: three or four of them yoked to a sledge will draw two or three hundred weight of wood piled upon it for several miles with great ease.

18. *Pointer*, originally a native of Spain, but long since naturalised in this country. This dog is remarkably apt at receiving instruction, and is chiefly employed in finding partridges, pheasants, &c., for the dog or gun.

19. *Pug*-dog has the nose turned upwards, the ears pendulous, and body square. In its outward appearance this animal resembles the bull-dog in miniature: it was formerly very common in England, but has of late years become scarce.

20. *Setter*, a nardy, nimble, and handsome dog, possessed of an exquisite scent and sagacity in discovering various kinds of game, especially birds, and esteemed one of the most valuable of our hunting dogs.

21. *Shepherd's* dog, canis domesticus of Linnæus, and le chien de berger of Buffon, is distinguished by its upright ears and remarkable velocity of the tail beneath; and stands at the head of the first class of farm dogs. This breed of dogs is said to be preserved in the greatest purity in the northern parts of Scotland. In driving a number of sheep to any distant part, a well-trained dog never fails to confine them to the road; he watches every avenue that leads from it, and pursues the stragglers, if any should escape, and forces them into order without doing them the least injury. If the herdsman be at any time absent from the flock, he depends upon his dog to keep them together; and, as soon as he gives the well-known signal, this faithful creature conducts them to his master, though at a considerable distance.

22. The *Spaniel* is known by its curled hair, and propensity to the water. It is far more elegant than the water dog, and its aspect more sagacious and mild: the ears are long and pendulous, and the hair beautifully crisped. It is chiefly used in discovering the haunts of water-fowl, and in finding birds that have been shot in marshy places.

23. *Terrier*, a small thickset dog, of which there are two kinds, one with the legs short, the back long, and most commonly of a black or yellowish color mixed with white; the other of more sprightly appearance, with the body shorter, and the color reddish-brown or black. In both the disposition is nearly the same; it has an acute smell, is generally an attendant on every pack of hounds, and is very expert in forcing foxes and other game out of their coverts.

24. *Turnspit*, a spirited and active dog, once an indispensable attendant on the spit. The turnspit is distinguished by having the body long, the legs very short, and the tail curled on the back; its usual color is grayish, with black spots. Gmelin has three varieties of this family of dogs, one of which has the feet straight, another the feet curved, and the third having the body covered with long curly hair.

25. *Water* dog, a variety, distinguished by its curly hair, which much resembles wool. The webs between the toes are larger than in most other dogs, which sufficiently accounts for the ease with which it swims, and renders it useful in hunting ducks and other water-fowl. Dogs of this breed are also frequently kept on board ships, for the purpose of sending into the water after any small article that may chance to fall overboard.

In order to choose a dog and bitch for good whelps, take care that the bitch come of a generous kind, be well proportioned, having large ribs and flanks; and likewise that the dog be of a good breed and young; for a young dog and an old bitch breed excellent whelps. The best time for hounds to be lined in, are the months of January, February, or March. The bitch should be used to a kennel, that she may like it after her whelping, and she ought to be kept warm. Let the whelps be weaned after two months old; and though it be somewhat difficult to choose a whelp under the dam that will prove the best of the litter, yet some approve that which is last, and account him to be the best. Others remove the whelps from the kennel, and lay them severally and apart one from the other; then they watch which of them the bitch first takes and carries into her kennel again, and that they suppose to be the best. Others again imagine that which weighs least when it sucks to be the best: this is certain, that the lighter whelp will prove the swifter. As soon as the bitch is littered, it is proper to choose them you mean to preserve, and drown the rest: keep the black, brown, or of one color, for the spotted are not much to be esteemed, though of hounds the spotted are to be valued. Hounds for chase are to be chosen by their colors. The white, with black ears, and a spot at the setting on of the tail, are the principal to compose a kennel of, if of good scent and condition. The black hound, or the black tanned, or the all liver-colored, or all white: the true talbots are the best of the stronger line; the grizzled, whether mixed or unmixed, so they be shag-haired, are the best verminers, and a couple of these are proper for a kennel. In short, take these marks of a good hound: that his head be a middle proportion, rather long than round: his nostrils wide, his ears large, his back bowed; his fillet great, his haunches large, thighs well trussed, ham straight, tail big near the reins, the rest slender, the leg big, the sole of the foot dry, and in the form of that of a fox, with large claws. As pointers and spaniels, when good of their kinds, and well broken, are very valuable to sportsmen, it is worth while to take some care to preserve them in health. This very much depends on their diet and lodging; frequent cleaning their kennels, and giving them fresh straw to lie on, is very necessary; or, in summer time, deal shavings or sand, instead of straw, will check the breeding of fleas. A dog is of a very hot nature; he should therefore never be without clean water by him, that he may drink when he is thirsty. In regard to their food, carrion is by no means proper for them: it must hurt their sense of smelling, on which the excellence of these dogs greatly depends. Barleymeal, the dross of wheat flour, or both mixed together, with broth or skimmed milk, is very proper food. For change, a small quantity of greaves, from which the tallow is pressed by the chandlers, mixed with flour, or sheep's feet well baked or boiled, are a very good diet: and when you indulge them with flesh, it should always be boiled. In the season of hunting, it is proper to feed the dogs in the evening before, and give them nothing in the morning they are to be taken out, but a little milk; but if you stop for your own refreshment in the day, the dogs should also get a little bread and milk. A pointer ought not to be hunted oftener than two or three days in a week; and unless you take care of his feet, and give him good lodging as well as proper food, he will not be able to perform that through the season. You should therefore, after a day's hard hunting, wash his feet with warm water and salt; and when dry, wash them with warm broth, or beer and butter, which will heal their soreness, and prevent a settled stiffness from fixing. It has been already observed, that dogs are of a hot constitution; the greatest relief to them in summer is twitch grass, sometimes called dog grass. It will therefore be proper to plant some of it in a place into which the dogs may be turned every morning; and by feeding freely on it, they will be cured of the sickness they are subject to, as well as of any extraordinary heat of the blood; but unless the grass be of this sort, it will have no effect. Dogs are exposed to different casualties, such as bites, blows, poison, &c. If dogs are bitten by any venomous creatures, as snakes, adders, &c., squeeze out the blood, and wash the place with salt and urine; then lay a plaster to it made of calamine, pounded in a mortar, with turpentine and yellow wax, till it come to a salve. If you give your dog some of the juice of calamine to drink in milk, it will be of service; or an ounce of treacle dissolved in sweet wine. If a dog has received any little wounds by forcing through hedges, or gets any lameness from a blow or strain, bathe the wound or grieved part with salt and cold vinegar (for warming it only evaporates the fine spirit); and when dry, if a wound, you may pour in it a little friar's balsam, which will perform the cure sooner than any method hitherto experienced.

For stealing a dog a man is to forfeit to the king, for the first offence, not less than £30, nor more than £50, with the charges attendant on his conviction, or be imprisoned not less than six, or more than twelve, months. Any person keeping a dog accustomed to bite, is liable to be indicted for a common nuisance; and an action will lie against any person for any sheep, horse, &c, torn by a dog, if it is proved that the animal has done so before

Dogs, Diseases of. Dogs are subject to various diseases: the principal are thus described by Blaine, with the method of their cure.

The *canine asthma* is hardly ever observed to attack any but either old dogs, or those who, by confinement, too full living, and want of exercise, may be supposed to have become diseased by these deviations from a state of nature. It is hardly possible to keep a dog very fat for any great length of time, without bringing it on. This cough is frequently confounded with the cough that precedes and accompanies distemper, but it may be readily distinguished from this by an attention to circumstances, as the age of the animal, its not affecting the general health, nor producing immediate emaciation, and its less readily giving way to medicine. The cure is often very difficult, because the disease has in general been long neglected before it is sufficiently

noticed by the owners. As it is in general brought on by confinement, too much warmth, and over-feeding; so it is evident the cure must be begun by a steady persevering alteration in these particulars. The medicines most useful, are alteratives, and of these occasional emetics are the best. One grain of tartarised antimony (i. e. tartar emetic), with two, three, or four grains of calomel, is a very useful and valuable emetic. This dose is sufficient for a small dog, and may be repeated twice a week with great success—always with palliation.

Of diseases of the *eyes* dogs are subject to almost as great a variety as ourselves, many of which end in blindness. No treatment yet discovered will remove or prevent this complaint. Sore eyes, though not in general ending in blindness, are very common among dogs. It is an affection of the eyelids, is not unlike the scrofulous affection of the human eyelids, and is equally benefited by the same treatment: an unguent made of equal parts of nitrated quicksilver ointment, prepared tutty and lard, very lightly applied. Dropsy of the eyeball is likewise sometimes met with, but is incurable.

Cancer. The virulent dreadful ulcer, that is so fatal in the human subject, and is called cancer, is unknown in dogs; yet there is very commonly a large schirrous swelling of the teats in bitches, and of the testicles (though less frequent) in dogs, that as it sometimes becomes ulcerated, so it may be characterised by this name. In the early state of the disease discutients prove useful, as vinegar with salt, and camphor and Spanish flies, with mercurial ointment, have sometimes succeeded; taking care to avoid irritating the part so much as to produce blister. But when the swelling is detached from the belly, and hangs pendulous in the skin, it had better be removed, and as a future preventive suffer the bitch to breed. Schirrous testicles are likewise sometimes met with; for these no treatment yet discovered succeeds but the removal of the part, and that before the spermatic chord becomes much affected, or it will be useless.

Colic. Dogs are subject to two kinds of colic; one arising from constipation of the bowels, the other is of a kind peculiar to dogs, apparently partaking of the nature of rheumatism, and also of spasm. From a sudden or violent exposure to cold, dogs become sometimes suddenly paralytic, particularly in the hinder parts; having great tenderness and pain, and every appearance of lumbago. In every instance of this kind there is considerable affection of the bowels, generally costiveness, always great pain. A warm bath, external stimulants, but more particularly active aperients, remove the colic. Colic, arising from costiveness, is not in general violently acute from the pain it produces; sometimes it appears accompanied with more spasm than is immediately dependent on the confinement of the bowels. In the former give active aperients, as calomel with pil. cochiæ, i. e. aloetic pill and glysters; in the latter castor oil, with laudanum and ether.

Cough. Two kinds of cough are common among dogs, one accompanying distemper, the other in an asthmatic affection of the chest. See *Canine Asthma.*

Distemper. This is by far the most common and most fatal among the diseases of dogs; hardly any young dog escaping it; and of the few who do escape it in their youth, three-fourths are attacked with it at some period afterwards: it being a mistake that young dogs only have it. It, however, generally attacks before the animal arrives at eighteen months old. When it comes on very early, the chances of recovery are very small. It is peculiarly fatal to greyhounds, much more so than to any other kind of dog generally carrying them off by excessive scouring. It is very contagious: but it is by no means necessary that there should be contagion present to produce it; on the contrary, the constitutional liability to it is such, that any cold taken may bring it on: and hence it is very common to date its commencement from dogs being thrown into water, or shut out on a rainy day, &c. There is no disease which presents such varieties as this, either in its mode of attack or during its continuance. In some cases it commences by purging, in others by fits. Some have cough only, some waste, and others have moisture from the eyes and nose, without any other active symptom. Moist eyes, dulness, wasting, with slight cough, and sickness, are the common symptoms that betoken its approach. Then purging comes on, and the moisture from the eyes and nose from mere mucus becomes pus, or matter. There is also frequently sneezing, with a weakness in the loins. When the disease in this latter case is not speedily removed, universal palsy comes on. During the progress of the complaint, some dogs have fits. When one fit succeeds another quickly, the recovery is extremely doubtful. Many dogs are carried off rapidly by the fits, or by purging; others waste gradually from the running from the nose and eyes, and these cases are always accompanied with great marks of putridity. In the early stages of the complaint give emetics; they are peculiarly useful. A large spoonful of common salt, dissolved in three spoonfuls of warm water, has been recommended; the quantity of salt being increased according to the size of the dog, and the difficulty of making him to vomit. While a dog remains strong, one every other day is not too much: the bowels should be kept open, but active purging should be avoided. In case the complaint should be accompanied with excessive looseness, it should be immediately stopped by balls made of equal parts of gum arabic, prepared chalk, and conserve of roses, with rice-milk as food. Two or three grains of James's powder may be advantageously given at night, in cases where the bowels are not affected, and in the cases where the matter from the nose and eyes betokens much putridity, we have witnessed great benefit from balls made of what is termed friars' balsam, gum guaiacum, and chamomile flowers in powder: but the most popular remedy is a powder prepared and vended under the name of Distemper Powder, with instructions for the use of it. Dogs, in every stage of the disease, should be particularly well fed. A seton we have not found so useful as is generally supposed; where the nose is much stopped, rubbing tar on the upper part is useful, and when there

.s much stupidity, and the head seems much affected, a blister on the top is often serviceable.

Fits. Dogs are peculiarly subject to fits. These are of various kinds, and arise from various causes. In distemper, dogs are frequently attacked with convulsive fits, which begin with a champing of the mouth and shaking of the head, gradually extending over the whole body. Sometimes an active emetic will stop their progress, but more generally they prove fatal. *Worms* are often the cause of fits in dogs. These deprive the animal wholly of sense; he runs wild till he becomes exhausted, when he gradually recovers, and perhaps does not have one again for some weeks. Confinement produces fits and likewise costiveness. Cold water thrown over a dog will generally remove the present attack of a fit; and for the prevention of their future recurrence it is evident, that the foregoing account of causes must be attended to.

Inflamed bowels. Dogs are very subject to inflammation of their bowels, from costiveness, from cold, or from poison. When inflammation arises from costiveness it is in general very slow in its progress, and is not attended with very acute pain, but it is characterised by the want of evacuation and the vomiting of the food taken, though it may be eaten with apparent appetite. In these cases the principal means to be made use of are the removal of the constipation by active purging, clysters, and the warm bath. Calomel with aloes forms the best purge. But when the inflammation may be supposed to arise from cold, then the removing of any costiveness that may be present is but a secondary consideration. This active kind of inflammation is characterised by violent panting, total rejection of food, and constant sickness. There is great heat in the belly, and great pain; it is also accompanied with great weakness, and the eyes are very red. The bowels should be gently opened with clysters, but no aloes or calomel should be made use of. The belly should be blistered, having first used the warm bath. When the inflammation arises from poison, there is then constant sickness, the nose, paws, and ears are cold, and there is a frequent evacuation of brown or bloody stools. Castor oil should be given, and clysters of mutton broth thrown up, but it is seldom any treatment succeeds.

Inflamed lungs. Pleurisy is not an uncommon disease among dogs. It is sometimes epidemic, carrying off great numbers. Its attack is rapid, and it generally terminates in death on the third day, by a great effusion of water in the chest. It is seldom that it is taken in time, when it is, bleeding is useful, and blisters may be applied to the chest.

Madness. The symptoms of madness are thus summed up by Mr. Daniel:—'At first the dog looks dull, shows an aversion to his food and company, does not bark as usual, but seems to murmur; is peevish, and apt to bite strangers; his ears and tail drop more than usual, and he appears drowsy; afterwards he begins to loll out his tongue, and froth at the mouth, his eyes seeming heavy and watery: if not confined he soon goes off, runs panting along with a dejected air, and endeavours to bite any one he meets. If the mad dog escapes being killed, he seldom runs above two or three days, when he dies exhausted with heat, hunger, and disease.' Blaine describes this formidable disease as commencing sometimes by dullness, stupidity, and retreat from observation; but more frequently, particularly in those dogs which are immediately domesticated around us, by some alteration in their natural habits; as a disposition to pick up and swallow every minute object on the ground; or to lick the parts of another dog incessantly; or to lap his own urine, &c. About the second or third day the disease usually resolves itself into one of two types. The one is called raging, and the other dumb madness. These distinctions are not, however, always clear; and to which is owing so much discrepancy in the accounts given by different persons of the disease.

The raging madness, by its term, has led to an erroneous conclusion, that it is accompanied with violence and fury; which, however, is seldom the case: such dogs are irritable and snappish, and will commonly fly at a stick held to them, and are impatient of restraint: but they are seldom violent except when irritated or worried. On the contrary, till the last moment they will often acknowledge the voice of their master, and yield some obedience to it. Neither will they usually turn out of their way to bite human persons; but they have an instinctive disposition to do it to dogs; and in a minor degree to other animals also: but, as before observed, seldom attack mankind without provocation.

Dumb madness is so called because there is seldom any barking heard, but more particularly, because the jaw drops paralytic, and the tongue lolls out of the mouth, black, and apparently strangulated. A strong general character of the disease, is the disposition to scratch their bed towards their belly; and equally so is the general tendency to eat trash, as hay, straw, wood, coals, dirt, &c.: and it should be remembered, that this is so very common and so invariable, that the finding these matters in the stomach after death, should always render a suspicion formed of the existence of the disease confirmed into certainty. Blaine is also at great pains to disprove the notion generally entertained, that rabid dogs are averse to water; and neither drink or come near it. This error he contends has led to most dangerous results; and is so far from true, that mad dogs from their heat and fever are solicitous for water, and lap it eagerly. When the dumb kind exists in its full force, dogs cannot swallow what they attempt to lap; but still they will plunge their heads in it, and appear to feel relief by it: but in no instance out of many hundreds, did he ever discover the smallest aversion to it. He lays very great stress on the noise made by rabid dogs, which he says is neither a bark nor a howl, but a tone compounded of both. It has been said by some that this disorder is occasioned by heat or bad food, and by others that it never arises from any other cause but the bite. Accordingly this malady is rare in the northern parts of Turkey, more rare in the southern provinces of that empire, and totally unknown under the burning sky of Egypt. At Aleppo, where these

animals perish in great numbers, for want of water and food, and by the heat of the climate, this disorder was never known. In other parts of Africa, and in the hottest zone of America, dogs are never attacked with madness. Blaine knows of no instance of the complaint being cured, although he has tried to their fullest extent the popular remedies of profuse bleedings, strong mercurial and arsenical doses, vinegar, partial drowning, night-shade, water plantain, &c.: he therefore recommends the attention to be principally directed towards the prevention of the malady. The preventive treatment of rabies or madness is, according to Blaine, always an easy process in the human subject, from the immediate part bitten being easily detected; in which case the removal of the part by excision or cautery is an effectual remedy. But, unfortunately for the agriculturist, it is not easy to detect the bitten parts in cattle, nor in dogs; and it would be therefore most desirable if a certain internal preventive were generally known. Dr. Mead's powder, the Ormskirk powder, sea-bathing, and many other nostrums are deservedly in disrepute: while a few country medicines, but little known beyond their immediate precincts, have maintained some character. Conceiving that these must all possess some ingredient in common, he was at pains to discover it; and which he appears to have realized, by obtaining, among others, the composition of Webb's Watford drink. In this mixture, which is detailed below, he considers the active ingredient to be the buxus or box, which has been known as a prophylactic as long as the times of Hippocrates and Celsus, who both mention it. The recipe, detailed below, has been administered to nearly three hundred animals of different kinds, as horses, cows, sheep, swine, and dogs: and appears to have succeeded in nineteen out of every twenty cases, where it was fairly taken and kept on the stomach. It appears also equally efficacious in the human subject; in which case he advises the extirpation of the bitten parts also. The box preventive is thus directed to be prepared:—Take of the fresh leaves of the tree-box two ounces, of the fresh leaves of rue two ounces, of sage half an ounce, chop these fine, and boil in a pint of water to half a pint; strain carefully, and press out the liquor very firmly; put back the ingredients into a pint of milk, and boil again to half a pint; strain as before; mix both liquors, which forms three doses for a human subject. Double this quantity is proper for a horse or cow. Two-thirds of the quantity is sufficient for a large dog, half for a middling-sized, and one-third for a small dog. Three doses are sufficient, given each subsequent morning, fasting; the quantity directed being that which forms these three doses. As it sometimes produces strong effects on dogs, it may be proper to begin with a small dose; but in the case of dogs we hold it always prudent to increase the dose till effects are evident, by the sickness, panting, and uneasiness of the dog. In the human subject, where this remedy appears equally efficacious, we have never witnessed any unpleasant or active effects, neither are such observed in cattle of any kind: but candor obliges us to add, that in a considerable proportion of these, other means were used, as the actual or potential cautery: but in all the animals other means were purposely omitted. That this remedy, therefore, has a preventive quality, is unquestionable, and now perfectly established; for there was not the smallest doubt of the animals mentioned either having been bitten, or of the dog being mad who bit them, as great pains were in every instance taken to ascertain these points. To prevent canine madness, Pliny recommends worming of dogs; and from his time to the present it has had, most deservedly, says Daniel, its advocates. He tells us, that he has had various opportunities of proving the usefulness of this practice, and recommends its general introduction. Blaine, on the contrary, asserts that the practice of worming is wholly useless, and founded in error; and that the existence of any thing like a worm under the tongue is incontestably proved to be false; and that what has been taken for it, is merely a deep ligature of the skin, placed there to restrain the tongue in its motions. He also observes, that the pendulous state of the tongue in what is termed dumb madness, with the existence of a partial paralysis of the under jaw, by which they could not bite, having happened to dogs previously wormed, has made the inability to be attributed to this source, but which is wholly an accidental circumstance; and happens equally to the wormed and unwormed dog.

Mange. This is a very frequent disease in dogs, and is an affection of the skin, either caught by contagion, or generated by the animal. The scabby mange breaks out in blotches along the back and neck, and is common to Newfoundland dogs, terriers, pointers, and spaniels, and is the most contagious. The cure should be begun by removing the first exciting cause, if removable, such as filth or poverty; or, as more generally the contrary (for both will equally produce it), too full living. Then an application should be made to the parts, consisting of sulphur and sal ammoniac: tar-lime-water will also assist. When there is much heat and itching, bleed and purge. Mercurials sometimes assist, but they should be used with caution; dogs do not bear them well.

Worms. Dogs suffer very much from worms, which, as in most animals, so in them, are of several kinds: but the effects produced are nearly similar. In dogs having the worms the coat generally stares; the appetite is ravenous, though the animal frequently does not thrive the breath smells, and the stools are singular, sometimes loose and flimsy, at others hard and dry; but the most evil they produce is occasional fits, or sometimes a continued state of convulsion, in which the animal lingers some time, and then dies; the fits they produce are sometimes of the violent kind, at others they exhibit a more stupid character, the dog being senseless, and going round continually. The cure consists, while in this state, in active purgatives joined with opium, and the warm bath; any rough substance given internally, acts as a vermifuge to prevent the recurrence. The worming of whelps is performed with a lancet, to slit the thin skin which immediately covers the worm; a small awl is then to be introduced under the centre of the worm to

raise it up; the farther end of the worm will, with very little force, make its appearance, and with a cloth taking hold of that end, the other will be drawn out easily; care should be taken that the whole of the worm comes away without breaking, and it rarely breaks unless cut into by the lancet, or wounded by the awl.

Dogs' Skins, dressed with the hair on, are used in muffs, made into a kind of buskins for persons in the gout and for other purposes. Dressed without the hair, they are used for ladies' gloves, and the linings of masks, being thought to make the skin peculiarly white and smooth. The French import many of these skins from Scotland, under a small duty. Here, when tanned, they serve for upper leathers for neat pumps. Dogs' skins dressed are exported under a small, and imported under a high duty. The French import from Denmark large quantities of dogs' hair, both white and black. The last is esteemed the best, and is worked up in the black list of a particular kind of woollen cloth.

Dogs, Isle of, a small tract of low land in the county of Middlesex, opposite to Greenwich; where Togodumnus, brother of Caractacus, is said to have been killed in a battle with the Romans, A.D. 46. The Isle of Dogs is said to have derived its name from being the depôt of the spaniels and greyhounds of Edward III.; and to have been chosen for this purpose because it lay contiguous to his sports of woodcock shooting, and coursing the red deer, in Waltham and the other royal forests in Essex. It is well known that, for the more convenient enjoyment of these sports, he generally resided, in the sporting season, at Greenwich.

One of the largest canals ever attempted in England has been cut, nearly one mile and a quarter in length, 142 feet wide at top, and twenty-four feet deep, across the Isle of Dogs, for shortening the passage of vessels to and from the pool, and to avoid the long circuit by Greenwich and Deptford. When the locks and other works of this canal were nearly finished, an unforeseen accident, by the blowing up of the coffer and preventer dams, just as the entrance-locks were completed, on the 24th of July 1805, prevented this canal from being opened until the 9th of December, when the Duchess of York West Indiaman, of 500 tons burden, passed through it, in presence of the lord mayor and corporation of London. Several large sums of public money having been granted out of the consolidated fund, in aid of this project, for the repayment of them, vessels passing through this canal of 200 tons or upwards paid, for three years after its completion, 2*d.* per ton; those from 200 to 100 tons, 1½*d.* per ton; from 100 to 50 tons, 1*d.* per ton; 50 to 20 tons, 5*s.* each, and boats and craft 1*s.* each. The noble Docks adjoining, we have described in the article of that name, which see.

Dog-bane, in botany. See Apocynum.

Dog-berry-tree. See Cornus.

Dog-days. See Canicula.

DOGE, *n. s.* Ital. *dodge*. The title of the chief magistrate of Venice and Genoa.

Doria has a statue at the entrance of the *doge's* palace, with the title of deliverer of the commonwealth. *Addison.*

Doge of Venice was formerly the chief of the council, and the mouth of the republic; yet the Venetians did not go into mourning at his death, as not being their sovereign, but only their first minister. At Venice he was elected for life; at Genoa, only for two years; he was addressed under the title of serenity, which was esteemed superior to that of highness. In fact, the doge of Venice was only the shadow of a prince; all the authority being reserved to the republic. Anciently, indeed, the doges were sovereigns; but, for a considerable time past, all the prerogatives reserved to the quality of doge were these: he gave audience to ambassadors; but did not give them any answer from himself, in matters of any importance; only he was allowed to answer as he pleased to the compliments they made to the seignory. The doge, as being first magistrate, was head of all the councils; and the credentials which the senate furnished its ministers in foreign courts, were written in his name; but a secretary of state signed and sealed them with the arms of the republic. The ambassadors directed their despatches to the doge: yet he was not allowed to open them but in presence of the counsellors. The money was struck in the doge's name, but not with his stamp or arms. All the magistrates rose and saluted the doge when he came into council: but the doge rose to none but foreign ambassadors. He nominated to all the benefices in the church of St. Mark; he was protector of the monastery of the Virgin, and bestowed certain petty offices of ushers of the household, called commanders of the palace. His family was not under the jurisdiction of the master of the ceremonies; and his children had staff-officers, and gondoliers in livery. But his grandeur was tempered with various circumstances, which rendered it burdensome. He could not go out of Venice without leave of the council; and if he did he was liable to receive affronts, without being entitled to demand satisfaction. His children and brothers were excluded from all the chief offices of state. They could not receive any benefice from the court of Rome; but were allowed to accept of the cardinalate, as being no benefice, nor including any jurisdiction. The doge could not divest himself of his dignity, for his ease; and, after his death, his conduct was examined by three inquisitors and five correctors, who sifted it with great severity.

Dog-fish. See Squalus.

DOGGER, in sea-language, a strong vessel with two masts, used by the Dutch, &c., for fishing in the German sea, and on the Dogger-bank. On the main-mast are set two square-sails; on the mizen-mast a gaff-sail, and above that a top-sail. Also a bow-sprit with a sprit-sail, and two or three jibs.

Dogger-bank, in geography, a very extensive sand-bank in the German Ocean, between the coast of England and Germany. It stretches south-east and north-west, beginning about twelve leagues from Flamborough-head, and extending nearly seventy-two leagues towards the coast of Jutland. Between the Dogger and the Well-bank, to the south, are the silver pits of the Marinus, which supply London with cod; a fish which loves the deep water near the banks.

A sanguinary but indecisive engagement was fought near it on 5th August 1781, between the English and Dutch.

DO'GGEREL, *adj.* & *n. s.* From dog. Loosed from the measures or rules of regular poetry; vile; despicable; mean.

Beside all this, he served his master
In quality of poetaster,
And rhymes appropriate could make
To every month i' the almanack;
When terms begin and end could tell,
With their returns, in *doggerel*. *Hudibras.*

Then hasten Og and Doeg to rehearse,
Two fools that crutch their feeble sense on verse;
Who by my muse to all succeeding times
Shall live, in spite of their own *doggerel* rhymes.
Dryden.

The hand and head were never lost of those
Who dealt in *doggerel*, or who pined in prose.
Dryden's Juvenal.

It is a dispute among the critics, whether burlesque poetry runs best in heroic verse, like that of the Dispensary; or in *doggerel*, like that of Hudibras.
Addison's Spectator.

The vilest *doggerel* Grub-street sends
Will pass for yours with foes and friends. *Swift.*

DOGGET (Thomas), an Irish comedian, was a native of Dublin. He played comic characters at Drury-lane with applause, and finally became joint manager of that house. He died at Eltham in Kent in 1721, leaving a sum to provide a coat and badge to be rowed for by six watermen, yearly on the 1st of August, the day of the accession of George I. He wrote a comedy called the Country Wake, afterwards altered to Flora, or Hob in the Well.

DOGGERS, in the English alum-works, a name given by the workmen to a sort of stone found in the same mines with the true alum rock, and containing some alum, though not near so much as the right kind. The county of York, which abounds greatly with the true alum rock, affords also a very considerable quantity of these doggers; and in some places they approach so much to the nature of the true rock, that they are wrought to advantage.

DOG'MA, *n. s.*
DOGMAT'IC, *adj.*
DOGMAT'ICAL, *adj.*
DOGMAT'ICALLY, *adv.*
DOGMAT'ICALNESS, *n. s.*
DOG'MATISM,
DOG'MATIST,
DOG'MATIZE, *v. n.*
DOG'MATIZER, *n. s.*
} Fr. *dogme*; Lat. *dogma*; Gr. δογμα, from δεδογμαι, per. pass. of δοκεω, to judge. Fixed principle or doctrine; see the extract from Ayliffe: dogmatic and dogmatical mean authoritative; positive; in the manner of a teacher. Dogmatism and dogmaticalness, positiveness of opinion; over-bearing manner. To dogmatise, to lay down propositions or opinions positively.

Such opinions, being not entered into the confessions of our church, are not properly chargeable either on Papists or Protestants, but on particular *dogmatizers* of both parties. *Hammond.*

I could describe the vanity of bold opinion, which the *dogmatists* themselves demonstrate in all the controversies they are engaged in. *Glanville's Scepsis.*

The dim and bounded intellect of man seldom prosperously adventures to be *dogmatical* about things that approach to infinite, whether in vastness or little ness. *Boyle*

I shall not presume to interpose *dogmatically* in a controversy, which I look never to see decided.
South.

Our poet was a stoic philosopher, and all his moral sentences are drawn from the *dogmas* of that sect.
Dryden.

Learning gives us a discovery of our ignorance, and keeps us from being peremptory and *dogmatical* in our determinations. *Collier on Pride.*

Critics write in a positive *dogmatick* way, without either language, genius, or imagination. *Spectator.*

One of these authors is indeed so grave, sententious, *dogmatical* a rogue, that there is no enduring him. *Swift.*

Dogma, in canon law, is that determination which consists in, and has a relation to, some casuistical point of doctrine, or some doctrinal part of the christian faith. *Ayliffe's Parergon.*

A *dogmatist* in religion is not a great way off from a bigot, and is in high danger of growing up to be a bloody persecutor. *Watts's Improvement of the Mind.*

Nothing can be more unphilosophical than to be positive or *dogmatical* on any subject; and even if excessive scepticism could be maintained, it would not be more destructive to all just reasoning and inquiry.
Hume.

Perhaps what I have here not *dogmatically* but deliberately written, may recal the principles of the drama to a new examination.
Johnson's Preface to Shakspeare.

If the present establishment should fall, it is this religion which will triumph in Ireland and in England, as it has triumphed in France. This religion, which laughs at creeds, and *dogmas*, and confessions of faith, may be fomented equally amongst all descriptions, and all sects; amongst nominal catholics, and amongst nominal churchmen; and amongst those dissenters who know little, and care less, about a presbytery, or any of its discipline, or any of its doctrines.
Burke.

At present, we can well conceive the probability of his *dogmatism* being patiently supported by attending admirers, awed by the literary eminence on which he stands. *Seward.*

DOGMATISTS, a sect of ancient physicians, of which Hippocrates was the founder. They are also called logici, logicians, from their using the rules of logic in medical subjects. They laid down definitions and divisions; reducing diseases to certain genera, and those genera to species, and furnishing remedies for them all; supposing principles, drawing conclusions, and applying those principles and conclusions to particular diseases under consideration; in which sense, the dogmatists stand contradistinguished from empirics and methodists.

DOG-RIBBED INDIANS, a nation of North Americans, who inhabit round Lake Edland, in the north-west part of North America. They are often at war with the Arathapescow Indians. Both these tribes are among the most savage of the human race. They trade with the Hudson Bay Company's settlements.

DOG-STAR. See SIRIUS.

DOGS-TOOTH. See ERYTHRONIUM.

DOG-WOOD. See CORNUS.

DOG-WOOD OF JAMAICA, a species of erythrina

DOG-WOOD TREE. See PISCIDIA.

DOIAGOI, an island of Asiatic Russia, in the Frozen Sea, at the entrance of Vagatskoi, or Waygat's Straits. Long. 57° 14′ E., lat. 70° 5′ N.

DOI'LY, *n. s.* A species of woollen stuff, so called, I suppose, says Dr. Johnson, from the name of the first maker.

We should be as weary of one set of acquaintance, though never so good, as we are of one suit, though never so fine: a fool and a *doily* stuff, would now and then find days of grace, and be worn for variety.
Congreve's Way of the World,

DOIT, *n. s.* Dut. *duyt;* Erse. *doyght.* A small piece of money.

When they will not give a *doit* to relieve a lam beggar, they will lay out ten to see a dead Indian.
Shakspeare. Tempest.

In Anna's wars a soldier, poor and old,
Had dearly earned a little purse of gold;
Tired with a tedious march, one luckless night
He slept, poor dog! and lost it to a *doit.* *Pope.*

Doit was the ancient Scottish penny piece; of which twelve were equal to a penny sterling. It was a small copper coin, as thin as a silver penny and not much larger. Doits were extremely numerous in Scotland before the Union, and were current for several years after it. Two of them were equal to the bodle, six to the baubee, and eight to the acheson. Some of them, struck in the reigns of Charles I. and II., with C. R.I or C. R.II on the one side, and the thistle on the other, are still to be found in the cabinets of antiquaries.

DOL, a town of France, in Brittany, department of the Ille and Vilaine. Population 3300. It is thirty-four miles north-west of Rennes, and 232 west of Paris.

DOLBEN (John), an English prelate, born at Stanwick, in Northamptonshire, in 1625. Was educated at Westminster School, and at Christ Church, Oxford. In the civil wars he served as an officer in the royal army, and rose to the rank of major. Returning on the decline of the king's affairs to college, he took his degrees and entered into orders. At the Restoration he obtained a canonry of Christ Church, and the deanery of Westminster. He was promoted in 1666 to the see of Rochester, and from thence in 1683 he removed to York, where he died of the small pox in 1686. Some of his sermons are still extant.

DOLCE (Charles, or Carlino), a celebrated historical and portrait painter, born at Florence in 1616. He was the disciple of Vignali, and was particularly fond of representing pious subjects, though he sometimes painted portraits. His works are easily distinguished by the peculiar delicacy with which he perfected all his compositions, by a pleasing tint of color, and by a judicious management of the chiaro scuro. His performance was remarkably slow; and it is reported that his brain was fatally affected by seeing Lucas Jordana despatch more business in four or five hours than he could have done in as many months. He died in 1686.

DOLE, *n. s.* From *deal;* Sax. ðælan. The act of distribution or dealing. The thing dealt.

It was your presurmise,
That in the *dole* of blows your son might drop.
Shakspeare.

Now my masters, happy man be his *dole,* say I every man to his business. *Id.*

The personal fruition in any man cannot reach to feel great riches: there is a custody of them, or a power of *dole* and donative of them, or a fame of them, but no solid use to the owner. *Bacon.*

Now thou art lifted up, draw me to thee,
And, at thy death giving such liberal *dole,*
Moist with one drop of thy blood my dry soul.
Donne. Divine Poems.

What if his eye-sight, for to Israel's God
Nothing is hard, by miracle restored,
He now be dealing *dole* among his foes,
And over heaps of slaughtered walk his way.
Milton.

Let us, that are unhurt and whole,
Fall on, and happy man be 's *dole.*
Hudibras.

Clients of old were feasted; now a poor
Divided *dole* is dealt at the' outward door,
Which by the hungry rout is soon dispatched.
Dryden's Juvenal.

At her general *dole,*
Each receives his ancient soul. *Cleaveland.*

Dole, *n. s.*
Dole'ful, *adj.*
Dole'fully, *adv.*
Dole'fulness, *n. s.*
Dole'some, *adj.*
Dole'somely, *adv.*
Dole'someness, *n. s.*
Do'lor, *n. s.*
Dolorif'ic, *adj.*
Do'lorous, *adj.*
Do'lorously, *adv.*

Old Fr. *dole,* seems to be the origin of the first class of these words; and Lat. *dolor* of the second. The substantive roots signify, in both, grief; sorrow; and hence its causes, pain; deprivation; and its expression, lamentation, complaint.

For none but you, or who of you it learns,
Can righfully aread so *doleful* lay. *Spenser.*

With kindly counter under mimick shade,
Our pleasant Willy, ah! is dead of late;
With whom all joy and jolly merriment
Is also deaded, and in *dolour* drent. *Id.*

We are taught, by his example, that the presence of *dolorous* and dreadful objects, even in minds most perfect, may, as clouds, overcast all seasonable joy.
Hooker.

Our sometime sister, now our queen,
Have we, as 'twere, with a defeated joy,
With mirth in funeral, and with dirge in marriage,
In equal scale weighing delight and *dole,*
Taken to wife. *Shakspeare. Hamlet.*

I've words too few to take my leave of you,
When the tongue's office should be prodigal,
To breathe the' abundant *dolour* of the heart. *Id.*

You take me in too *dolourous* a sense:
I spake t' you for your comfort. *Id.*

A mind fixed and bent upon somewhat that is good, doth avert the *dolours* of death. *Bacon.*

They might hope to change
Torment with ease, and soonest recompense
Dole with delight. *Milton's Paradise Lost.*

No light, but rather darkness visible,
Served only to discover sights of woe,
Regions of sorrow; *doleful* shades, where peace
And rest can never dwell. *Id.*

Yet to that hideous place not so confined
By rigour unconniving, but that oft
Leaving my *dolorous* prison I enjoy
Large liberty. *Id.*

No man could comfort other: every man was too full of his own sorrow: helping rather to make the noise of the lamentation more *doleful* and astonishing. *Bp. Hall. Contemplations.*

With screwed face, and *doleful* whine, they only ply with senseless harangues of conscience against carnal ordinances. *South.*

The pain returned, dissipating that vapour which obstructed the nerves, and giving the *dolorifick* motion free passage again. *Ray.*

She earnestly entreated to know the cause thereof, that either she might comfort or accompany her *doleful* humour. *Sidney.*

Never troubling him either with asking questions or finding fault with his melancholy; but rather fitting to his *dolour*, *dolorous* discourses of their own and other folks' misfortunes. *Id.*

Hell-ward bending o'er the beach descry
The *dolesome* passage to the infernal sky.
Pope's Odyssey.

Talk not of ruling in this *dolorous* gloom,
Nor think vain words, he cried, can ease my doom.
Pope.

Happy the mortal man, who now at last
Has thought this *doleful* vale of misery past;
Who to his destined stage has carried on
The tedious load, and laid his burden down.
Prior.

This, by the softness and rarity of the fluid, is insensible, and not *dolorifick*. *Arbuthnot on Air.*

DOLE, a large well-built town of France, on the river Doubs, in Franche Compté, in the department of the Jura. The country around has, from its fertility and beauty, received the name of the Val d'Amour. It has several good edifices, as the Palais de Justice, the former Chambre des Comptes, the church of Notre Dame, the College d'Arc, and the Hotel Dieu Hospital. It has also a pleasant public promenade.

Dole was the Dola Sequanarum of the Romans, and contains considerable remains of that people. The great Roman road to Lyons passed through this place; and here are two aqueducts and a public edifice near the river of their erection. It was the capital of Franche Compté until 1674, and, is twenty-three miles south of Besançon, and twenty-eight south-east of Dijon.

DOLE, LA, a lofty point of the Jura chain of mountains, between the department of Jura and the Swiss canton of Vaud, it is elevated 5600 feet above the level of the sea, and has the appearance of an immense rock. From its summit there is a most magnificent view for 100 miles in each direction, and, on the side of France, a prospect which extends into Burgundy.

DOLGELLY, or DOLGETH, a town of North Wales, in Merionethshire, at the foot of the mountain Cader-Idris. A new court-house has been erected, in which the summer assizes for the county are held. The county jail is situated at a small distance from the town. The town and its neighbourhood have a peculiar manufacture of coarse undyed woollen cloth, called webbing or white plains, which is chiefly exported. It has a market on Tuesday. It is seated in a valley on the banks of the Avon, thirty-one miles north-west of Montgomery, and 212 north-west of London.

DOLICHOS, in botany, a genus of the decandria order, and diadelphia class of plants; natural order thirty-second, papilionaceæ. The basis of the vexillum has two callous knobs, oblong, parallel, and compressing the alæ below. There are fifty-three species, natives of the East and West Indies and of the Cape: the most remarkable are: 1. D. lablab, with a winding stalk, a native of warm climates, where it is frequently cultivated for the table. The Egyptians make pleasant arbours with it, by supporting the stem and fastening it with cords; by which means the leaves form an excellent covering, and an agreeable shade. 2. D. pruriens, the couhage, cow-itch, or stinging bean, is also a native of warm climates. It has a fibrous root, and an herbaceous climbing stalk, which is naked, dividing into a great number of branches; and rises to a great height when properly supported. The leaves are alternate and trilobate, rising from the stem and branches about twelve inches distant from each other. The foot-stalk is cylindrical, from six to fourteen inches long. From the axilla of the leaf descends a pendulous solitary spike, from six to fourteen inches long, covered with long blood-colored papilionaceous flowers, rising in clusters of three each, in a double alternate manner, from small fleshy protuberances, each of which is a short pedunculus of three flowers. These are succeeded by leguminous, coriaceous pods, like those of kidney beans, four or five inches long, densely covered with sharp hairs, which penetrate the skin, and cause great itching, stinging like a nettle, though not quite so painfully. This will grow in any soil in those countries where it is a native: but is generally eradicated from all cultivated grounds; because the hairs from the pods fly with the winds, and torment every animal they happen to touch. If it was not for this mischievous quality, the beauty of its flower would entitle it to a place in the best gardens. It flowers in the cool months, from September to March, according to the situation. The spiculæ, or sharp hairs, of this plant, have been long used in South America as a vermifuge, and have of late been frequently employed in Britain. The spiculæ of one pod mixed with syrup or molasses, and taken in the morning fasting, is a dose for an adult. The beans are used in the East Indies as a cure for the dropsy. 3. D. soja is a native of Japan, where it is termed daidsu; and, from its excellence, mame; that is, the pod, by way of eminence. It grows with an erect, slender, and hairy stalk, to the height of about four feet. The leaves are like those of the garden kidney bean. The flowers, of a bluish-white, are produced from the blosom of the leaves, and succeeded by bristly hanging pods resembling those of the yellow lupine, which commonly contain two, sometimes three, large white seeds. This legumen is doubly useful in the Japanese kitchens. It serves for the preparation of a substance named miso, that is used as butter; and likewise of a pickle celebrated among them under the name of sooju or soy.

DOLL, *n. s.* A contraction of Dorothy; and hence a child's toy.

Doll tearsheet. *Shakspeare.*

DO'LLAR, *n. s.* Dutch *daler*. See below. A Dutch and German coin of different value, from about two shillings and sixpence to four and sixpence.

He disbursed
Ten thousand *dollars* for our general use.
Shakspeare. Macbeth.

Dollar, in this country, is chiefly applied to the Spanish silver coin, otherwise called a piece of eight. Dollars are also coined in different parts of Germany and Holland: and have their subdivisions into semi dollars, quarter dollars, &c. See Coins.

DOLLART Bay, or The Dollert, an arm of the North Sea, extending between East Friesland in Hanover, and Groningen in the Netherlands, to the mouth of the Ems. It is said to have been formed by the sea breaking in here towards the close of the thirteenth century; when it swept away nearly fifty villages. On the side of East Friesland, the sea has in some measure receded.

DOLLOND (John), a celebrated optician, the inventor of the achromatic telescope, was descended from that useful body of artificers the French refugees of Spitalfields, London, where he was born 10th June, 1706. His education was limited by the circumstances of his friends, who could only destine him to their own occupation, and he is said to have passed many years of his life as an operative silk-weaver. Mr. Dollond, however, possessed a mathematical and philosophical taste, which soon disclosed itself; he acquired the Greek and Latin languages, together with a considerable knowledge of anatomy and scholastic divinity; and though he married early, found means to continue his scientific pursuits, and bring up his family. In his eldest son Mr. Peter Dollond, he was happily afforded an heir of his own taste, and in 1752 he had so well established him in business as an optical instrument-maker, that he quitted Spitalfields to join him in partnership. This same year was read in the Royal Society, a letter of Mr. J. Dollond's to James Short, A. M. F. R. S., concerning a mistake in Mr. Euler's Theorem for correcting the Aberration in the Object Glasses of Refracting Telescopes, together with an introductory letter of Mr. Short, in which Euler's calculations are disputed; with Euler's answers to Short and Dollond. (Phil. Trans. 1753, p. 287.) 'It is somewhat strange,' says Mr. Dollond, 'that any body now-a-days should attempt to do that which so long ago has been demonstrated impossible:' and his discoveries were doubtless for a while retarded by his deference to the great name of Newton, whom Euler considered to agree with him; and whose experiments were certainly compatible with the doctrine of Euler, while Mr. Dollond was better acquainted than either with the mechanism of the eye. In 1753 he describes, in a second letter to Mr. Short, a telescope with six glasses, 'calculated for correcting, either wholly or in a great measure, the errors of refraction arising from the dispersion of the different colors, as well as from the spherical form of the surfaces of the eye-glasses;' appealing to the superiority of the telescopes, which he had thus constructed, above those which had before been in use. He here reserves the detail of his theory for a future occasion.

His great discovery is narrated in an 'Account of some Experiments concerning the different Refrangibility of Light,' Phil. Trans. 1758, p. 733. Mr. Dollond commenced the decisive experiments here described, by putting a common prism of glass into a prismatic vessel of water, and varying the angle of the vessel till the mean refraction of the glass was compensated; when he found that the colors were not destroyed, as they were supposed to have been in a similar experiment of Sir Isaac Newton's; for the remaining dispersion was nearly as great as that of a prism of glass of half the refracting angle. A thinner wedge of glass being then employed, our optician found that the image was colorless when the refraction of the water was about one-fourth greater than that of the glass. He next attempted to construct compound object-glasses by enclosing water between two lenses; but in this arrangement he found great inconvenience from the spherical aberration. He was, therefore, obliged to try the effects of different kinds of glass, and fortunately discovered that the refractions of flint and crown glass were extremely convenient for his purpose, the image afforded by them being colorless, when the angles were to each other nearly as two to three: hence he inferred that a convex lens of crown-glass, and a convex one of flint, would produce a colorless image when their focal distances were in the same proportion. 'The spherical aberration, where the curvature was so considerable, still produced some inconvenience; but, having four surfaces capable of variation, he was enabled to make the aberrations of the two lenses equal; and since they were in opposite directions, they thus corrected each other.' These arrangements required great accuracy of execution for their complete success; but, in the hands of the inventor, they produced the most admirable instruments; and he was fortunate in obtaining a quantity of glass of remarkably uniform density. He afterwards made some small Galilean telescopes, with triple object-glasses.

For these inventions Mr. Dollond received the Copleian medal of the Royal Society; and in 1761 he was chosen a fellow of that learned body, and appointed optician to the king. Other valuable contributions of his to the Society were, A description of a Contrivance for Measuring Small Angles, and an Explanation of an Instrument for that purpose. Trans. 1753 and 1754. His instrument consisted of a divided object-glass, with a scale for determining the distance of the images by measuring the linear displacement of the two portions of the glass.

Mr. Dollond, however, did not long enjoy these well-deserved honors. On the 30th of November, 1761, as he was reading a new work of Clairaut on the theory of the moon, he fell down in an attack of apoplexy, which shortly became fatal. He left two sons who succeeded to his business.

Dollond (Peter), eldest son of Mr. John Dollond, the optician, was born in 1730. He communicated, in 1765, a paper to the Royal

Society on his improvement of telescopes; adopting his father's contrivance for measuring small angles (see above); and in 1772 another on his additions to and alterations in Hadley's quadrant. In 1779 he gave an account of his equatorial instrument for correcting the errors arising from refraction in altitude; and in 1789, 'Some account of the discovery made by his father in refracting telescopes,' which became also a separate publication. He died at Kensington in 1820, at the advanced age of ninety years.

DOLOMIEU (Deodate-Guy-Silvain Tancred Gratet de), a celebrated geologist, was born in Dauphiny in 1750. He entered into the service of the knights of Malta, and became a member of the order; but, happening to kill one of his companions, was sentenced to death. The grand master, however, granted him a pardon, but it was necessary that this should be confirmed by the pope, and Dolomieu was closely confined for nine months under suspense. This perhaps decided his future studious habits. At the age of twenty-two he went to Metz, where he studied chemistry and natural history. In 1783 he published his voyage to the Lipari Isles, and a memoir on the earthquakes of Calabria. In 1788 appeared his Memoire sur les Isles Ponces, et catalogue raisonné de l'Etna.

On the breaking out of the revolution, Dolomieu ardently embarked, with his friend La Rochefoucault, in the supposed cause of liberty; he was at Paris on the 14th of July, and when La Rochefoucault fell a victim to the horrors of the day, watched his last moments, and received the affectionate messages which he sent to his mother and his wife. He now resumed his geological studies in other parts of Europe, and particularly in its southern countries. He afterwards extended his researches into the physical constitution of Egypt, on which subject he addressed a Memoir inserted in the Journ. Phys., v. xlii. In 1795 we find him again in France; and, upon the establishment of the school of Mines, he became Professor of Geology and Inspector of Mines. He was also one of the original members of the National Institute of Sciences and Arts. From this time he redoubled his philosophical labors, and published a great number of memoirs in the course of a few years. He also furnished various contributions to the Encyclopédie Méthodique. On the scientific arrangements being made for the expedition to Egypt, he was invited to take part in them: and on his journey was employed as a negociator for the surrender of Malta. In Egypt he visited the pyramids, and examined some of the mountains which form the limits of the country; but his health compelled him to return long before his companions. On his voyage home, the vessel was nearly lost in a tempest, and was only saved at the last extremity by running into a port in the gulf of Tarentum. Here, as a knight of Malta, he was pronounced a traitor to the existing government, and committed to close confinement at Messina. In this unfortunate situation he remained until the peace of 1800, in which the French government stipulated expressly for his release. During this period he had commenced a Series of Lectures on the Philosophy of Mineralogy, written with bones and soot-water, on the margin of the few books he was allowed to read. He was appointed, during his confinement, the successor of Daubenton in the Museum of Natural History. His last publication was Sur la Philosophie Minéralogique et sur l'espèce Minéralogique. He died at Paris, universally respected, 27th of November, 1801.

DOLOMITE. Of this calcareo-magnesian carbonate, we have three sub-species.

1. Dolomite, of which there are two kinds, viz. 1st. White granular. It occurs massive, and in fine granular distinct concretions, loosely aggregated. Lustre glimmering and pearly. Fracture imperfect slaty; hard as fluor, and brittle. Specific gravity 2·83. It effervesces feebly with acids, and is phosphorescent on heated iron, or by friction. Its constituents are 46·5 carbonate of magnesia, 52·08 carbonate of lime, 0·25 oxide of manganese, and 0·5 oxide of iron. 2d. Brown dolomite, or magnesian limestone of Tennant. Color, yellowish-gray and yellowish-brown. Massive, in minute granular concretions. Lustre, internally glistening. Fracture splintery. Harder than calcareous spar. Brittle. Specific gravity of crystals, 2·8. It dissolves slowly, and with feeble effervescence. Its constituents are, lime 29·5, magnesia 20·3, carbonic acid 47·2, alumina and iron 0·8. In the north of England it occurs in beds of considerable thickness, and great extent, resting on the Newcastle coal formation. In the Isle of Man it occurs in a limestone which rests on gray wacke.

2. Columnar Dolomite. Color, pale grayish-white. Massive, and in thin prismatic concretions. Cleavage imperfect. Fracture uneven. Lustre vitreous, inclining to pearly. Breaks into acicular fragments. Brittle. Specific gravity 2·76. Its constituents are, 51 carbonate of lime, 47 carbonate of magnesia, 1 carbonated hydrate of iron. It occurs in serpentine in Russia.

3. Compact Dolomite, or Gurhofite. Color, snow-white. Massive and dull. Fracture flat conchoidal. Semi-hard. Difficultly frangible. Specific gravity 2·76. When pulverised, it dissolves with effervescence in hot nitric acid. It consists of 70·5 carbonate of lime, and 29·5 carbonate of magnesia. This kind occurs in veins of serpentine rocks, near Gurhoff, in Lower Austria.

DOLPHIN, *n. s.* Fr. *dauphin;* Germ. Span. Ital. and Lat. *delphin*, from Gr. δελφις ὰ δελφαξ, a pig, because the dolphin resembles a pig in its fatness, and the form of its intestines, &c., says Minsheu after Becmanus. A fish. See our article Delphinus.

> His delights
> Were *dolphin* like; they shewed his back above
> The element they lived in. *Shakspeare.*
>
> Draw boys riding upon goats, eagles, and *dolphins*. *Peacham.*
>
> Misshapen seals approach in circling flocks,
> In dusky mail the tortoise climbs the rocks,
> Torpedoes, sharks, rays, porpus, *dolphins*, pour
> Their twinkling squadrons round the glittering shore.
> *Darwin.*

Dolphin of the Mast, in sea language, a peculiar kind of wreath, formed of plaited cordage, to be fastened occasionally round the masts as a support to the puddening, whose use is to sustain the weight of the fore and main yards in case the rigging or chains by which those yards are suspended should be shot away in the time of battle; a circumstance which might render their sails useless at a season when their assistance is extremely necessary.

DOLT, *n. s.* } Teut. and Sax. *dol.* A heavy
Doltish, *adj.* } stupid fellow; a blockhead; a thickscull; a loggerhead. It is clearly the past participle of *dull*, as Mr. Tooke says.

Thou hast not half that power to do me harm,
As I have to be hurt: oh gull, oh *dolt*,
As ignorant as dirt! *Shakspeare. Othello.*

Like men condemned to thunder-bolts,
Who, ere the blow, become mere *dolts*;
They neither have the hearts to stay,
Not wit enough to run away. *Hudibras.*

Dametas, the most arrant *doltish* clown that ever was without the privilege of a bauble. *Sidney.*

Let *dolts* in haste some altar fair erect
To those high powers, which idly sit above. *Id.*

Wood's adulterate copper,
Which, as he scattered, we, like *dolts*,
Mistook at first for thunder-bolts. *Swift.*

DO'MAIN, *n. s.* Fr. *domaine*, from Lat. *dominium.* Empire; dominion; possession. Hence also, we may remark, our termination *dom* as birthdom, kingdom, &c.

Rome's great emperor, whose wide *domain*
Had ample territory, wealth and power. *Milton.*

A Latian field, with fruitful plains,
And a large portion of the king's *domains*.
Dryden's Æneid.

Ocean trembles for his green *domain*. *Thomson.*

So Howard, Moira, Burdett, sought the cells,
Where Want, or Wo, or Guilt in darkness dwells;
With Pity's torch illumed the dread *domains*,
Wiped the wet eye, and eased the galling chains.
Darwin.

Vain end of human strength, of human skill,
Conquest, and triumph, and *domain*, and pomp,
And ease, and luxury! *Byron.*

Domain. See Demesne.

DOMAT (John), a celebrated French lawyer born in 1625, who, observing the confused state of the laws, digested them in 4 vols. 4to, under the title of The Civil Laws in their Natural Order; for which Louis XIV. settled on him a pension of 2000 livres. Domat was intimate with the famous Pascal, who left him his private papers at his death. He died in 1696.

DOMBES, a ci-devant principality of France, about twenty-four miles long, and twenty-one broad, lying around and partly in the late province of Burgundy, but not under its government, on the west bank of the Soane. Trevoux was the capital. It now forms part of the department of Ain.

DOMBEY (Joseph), a French botanist of celebrity, was born at Macon in 1742. He took the degree of doctor of physic at Montpelier, and in 1778 went to South America, where he discovered the majestic tree of the tribe of pines, now named after him, Dombeya. On his return to Europe, in 1785, the revolution disgusted him so much that he re-embarked for America; and, being captured on the passage, died in prison in the island of Montserrat, February 19th, 1796.

DOMBEYA, in botany, a genus of the class monodelphia and order dodecandria: cal. double, outer three-leaved, deciduous: pet. five: stam. ten or twenty: styl. five-cleft: caps. five, united, one-celled, one or many seeded. Species twelve, chiefly natives of the isles of Bourbon and Mauritius.

DOMBOO, a considerable town of Bornou, Africa, situated on the caravan route from Mourzouk, and the first which occurs after passing the desert of Bilma. It is situated amid fertile plains.

Domboo Lakes are situated on the northern extremity of Bornou, and supply that kingdom, Cassina, and the states on the south of the Niger, with salt. The merchants of Agadez bring hither annually a large caravan, which they load with this commodity, and convey it to the surrounding counties. These lakes are supposed to be the Chelonides Palus of Ptolemy.

DOME, *n. s.* Fr. *dome*, from Lat. *domus.* A building, nouse; fabric. Also, from an early shape of roofs, probably a hemispherical arch, a cupola.

Best be he called among good men,
Who to his God this column raised;
Though lightning strike the *dome* again,
The man who built it shall be praised. *Prior.*

Stranger! whoe'er thou art, securely rest
Affianced in my faith, a friendly guest;
Approach the *dome*, the social banquet share.
Pope's Odyssey.

From *dome* to *dome* when flames infuriate climb,
Sweep the long street, invest the tower sublime;
Gild the tall vanes amid the astonished night,
And reddening heaven returns the sanguine light.
Darwin.

While the vine-mantled brows
The pendent goats unveil, regardless they
Of hourly peril, though the clefted *domes*
Tremble to every wind. *Byron.*

Dome, in architecture is a roof of a hemispherical form, raised over the middle of a building, as a church, hall, pavilion, vestibule, stair-case, &c., by way of crowning. Domes are the same with what the Italians call cupolas; or, according to Vitruvius, tholi. They are usually made round, though we have instances of square ones; as those of the Louvre; and others that are polygons, as that of the ci-devant Jesuits' church in the Rue St. Antoine at Paris. They have usually columns ranged around their outsides, both by way of ornament, and to support the vault. See Architecture.

Dome, in chemistry, the upper part of furnaces, particularly portable ones. It has the figure of a hollow hemisphere, or small dome. Its use is to form a space in the upper part of the furnace, the air of which is continually expelled by the fire; hence the current of air is considerably increased, which is obliged to enter by the ash-hole, and to pass through the fire, to supply the place of the air driven from the dome. The form of this piece renders it proper to reflect or reverberate a part of the flame upon substances

which are in the furnace, which has occasioned this kind of furnace to be called a reverberatory one. See CHEMISTRY.

DOME, or DOOM, signifies judgment, sentence, or decree. The homagers' oath in the black-book of Hereford ends: 'So help me God at his holy dome, and by my trowthe.'

DOMENICHINO, a famous Italian painter, born at Bologna in 1581. He was at first a disciple of Calvart the Fleming, but soon quitted his school for that of the Caraccis. He always applied himself to his work with much study and thoughtfulness; and never offered to touch his pencil but when he fancied a kind of enthusiasm upon him. His great skill in architecture also procured him the appointment of chief architect of the apostolical palace from pope Gregory XV. nor was he without a theoretical knowledge of music. He died in 1641.

DOMESDAY BOOK, an ancient record, made in the time of William I. and containing a survey of all the lands of England. It consists of two volumes. The first is a large folio, written on 382 double pages of vellum, in a small but plain character; each page having a double column. Some of the capital letters and principal passages are touched with red ink; and some have strokes of red ink run across them, as if scratched out. This volume contains a description of thirty-one counties. The other volume is in 4to., written upon 450 double pages of vellum, but in a single column, and in a large but very fair character. It contains the counties of Essex, Norfolk, Suffolk, part of the county of Rutland included in that of Northampton, and part of Lancashire in the counties of York and Chester. This work, according to the red book in the exchequer, was begun by order of William the Conqueror, with the advice of his parliament, in the year of our Lord 1080, and completed in the year 1086. The reason given for taking this survey, as assigned by several ancient records and historians, was, that every man should be satisfied with his own right, and not usurp with impunity what belonged to another. But, besides this, it is said by others, that now all those who possessed landed estates became vassals to the king, and paid him so much money by way of homage in proportion to the lands they held. This appears very probable, as there was at that time extant, a general survey of the whole kingdom, made by order of king Alfred. For the execution of the survey recorded in domesday book, commissioners were sent into every county and shire; and juries summoned in each hundred, out of all orders of freemen, from barons down to the lowest boors. These commissioners were to be informed by the inhabitants, upon oath, of the name of each manor, and that of its owner; also by whom it was held in the time of Edward the Confessor; the number of hides; the quantity of wood, of pasture, and of meadow land; how many ploughs were in the demesne, and how many in the tenanted part of it; how many mills, how many fish-ponds or fisheries belonged to it; with the value of the whole together in the time of king Edward, as well as when granted to king William, and at the time of this survey; also whether it was capable of improvement, or of being advanced in its value: they were likewise directed to return the tenants of every degree, the quantity of lands then and formerly held by each of them; what was the number of villains or slaves, and also the number and kinds of their cattle and live stock. These inquisitions being first methodised in the country, were afterwards sent up to the king's exchequer. This survey, at the time it was made, gave great offence to the people; and occasioned a jealousy that it was intended for some new imposition. But notwithstanding all the precaution taken by the conqueror, to have this survey faithfully and impartially executed, it appears, from indisputable authority, that a false return was given in by some of the commissioners; and that, as it is said, out of a pious motive. This was particularly the case with the abbey of Croyland in Lincolnshire, the possessions of which were greatly under-rated, both with regard to quantity and value. Perhaps more of these pious frauds were discovered, as it is said Ralph Flambard, minister to William Rufus, proposed the making a fresh and more rigorous inquisition; but this was never executed. Notwithstanding this proof of its falsehood in some instances, which must throw a suspicion on others, the authority of domesday book was never permitted to be called in question; and always, when it has been necessary to distinguish whether lands were held in ancient demesne, or in any other manner, recourse was had to that only to determine the doubt. From this definitive authority, from which, as from the sentence pronounced at domesday, or the day of judgment, there could be no appeal, the name of the book is said to have been derived. But Stowe assigns another reason for this appellation; namely that domesday book is a corruption of domus Dei book; a title given it because heretofore deposited in the king's treasury, in a place of the church of Westminster, or Winchester, called domus Dei. From the great care formerly taken for the preservation of this survey, we may learn the estimation in which its importance was held. The dialogue de Scaccaris says, 'Liber ille (Domesday) sigilli regis comes est individuus in thesauro.' Until lately it has been kept under three different locks and keys; one in the custody of the treasurer, and the others in that of the two chamberlains of the exchequer. It is now deposited in the chapter-house at Westminster, where it may be consulted on paying to the proper officers a fee of 6*s*. 8*d*. for a search, and 4*d*. per line for a transcript. Besides the two volumes above mentioned, there is also a third made by order of the same king; and which differs from the others in form more than matter. There is also a fourth called domesday, which is kept in the exchequer; which, though a very large volume, is only an abridgment of the others. In the remembrancer's office in the exchequer is kept a fifth book, likewise called domesday, which is the same with the fourth book already mentioned. King Alfred had a roll which he called domesday; and the domesday-book made by William the Conqueror, referred to the time of Edward the Confessor, as that of king Alfred did to the time of Ethelred. The fourth book of domesday having many pictures and gilt letters

in the beginning relating to the time of king Edward the Confessor, this led some to a false opinion that domesday-book was composed in the reign of king Edward.

In 1767, in consequence of an address from the House of Lords, his late Majesty gave directions for the publication of domesday-book, among other records. An engraved fac-simile was at first contemplated; but the great expense of such an undertaking caused it to be laid aside: and a tolerably exact fac-simile metal type having at length been obtained, the editing of the work was confided to Mr. Abraham Farley, Deputy Keeper of the Records in the Chapter-house, at Westminster, a gentleman of singular learning and experience in this department of literature, who had had almost daily recourse to the book for more than forty years. The work was commenced in 1770, and was completed early in 1783, at the press of Mr. John Nichols—the type with which it was executed, was destroyed in the fire which consumed his printing-office in February, 1808. Accurately as Mr. Farley accomplished the task which had been assigned to him, the printed Domesday was comparatively of little value for want of minute indexes. This deficiency has been supplied under the direction of the Record Commission, in a folio volume, containing indexes of names of persons, of places, and things, so minute, (and from frequent reference, we can state, so accurate,) that the object of enquiry, if in the work, may be readily ascertained. These indexes have been compiled by the clerks in the Record Office of the Chapter-house, under the superintendence of the late Right Hon. George Rose, the principal keeper of that repository of our national muniments: and to them is prefixed a very elaborate Introduction to Domesday, by Mr. Ellis, one of the librarians of the British Museum, containing dissertations on the formation and execution of the Record, the principal matters therein contained, its original uses, conservation, and authority in courts of law. From these disquisitions, which are comprised in eighty-eight well-filled folio pages, the preceding particulars have been chiefly abridged. In further illustration of this ancient and important record, the Commissioners have thought it their duty to print a supplemental volume of similar surveys, of nearly coeval date, for Exeter, Ely, and Winton or Winchester, which appear to have been the original inquisitions whence the general survey was compiled, so far as relates to those districts: and, as the county palatine of Durham was not comprised within the Conqueror's survey, they have deemed it expedient to add the contents of a similar survey for that county, denominated the Boldon Book, though its date is somewhat later. This supplement to Domesday forms a large volume in folio, and is enriched with a critical and historical dissertation on the records there printed, together with appropriate indexes, by its editor, Mr. Ellis.

The following extract will give our readers an idea of the nature of this venerable Record:

IN BRIXISTAN HUND'.

Rex ten BERMUNDESYE. Com herald tenuit. Tc̃ se defd
p. xiii. hid. m° p. xii. hid. Tra. c̃. viii. car. In dñio. c̃ una
car. 7 xxv. villi 7 xxxiii. bord cū. un. car.
Ibi nova 7 pulchra eccla. 7 xx. ac̃ p^a ti. Silva v. porc
de pasnag: In Lundonia. xiii. burg̃ses de xliiii. den.
T. R. E. 7 m° val. xv. lib 7 vicecom̄ hñ. xx. sol.
Comes morit ten. i. hid̄ que T. R. E. 7 post fuit in hoc ꝺ

That is:

IN BRIXISTAN HUNDredo.

Rex tenet BERMUNDESYE. Heraldus comes tenuit. Tunc se defendebat pro xiii hidis, modo pro xii hidis. Terra est viii carrucatarum. In dominio est una carrucata et xxv villani et xxxiii bordarii cum una carrucata. Ibi nova et pulchra ecclesia, et xx acræ prati. Silva v porcis de pasnagio. In Lundonia xiii burgenses de xliiii denariis. Tempore Regis Edwardi et modo valet xv libras et vicecomes habet xx solidos. Comes Moritoniensis tenet i hidam quae Tempore Regis Edwardi et post fuit in hoc Manerio.

In English thus: In Brixistan Hundred.

'The king holds BERMUNDESYE. Earl HERALD held it [before]. At that time it was rated at thirteen hides; now, at twelve. The arable land is eight carrucates [*or* plough-lands]. There is one carrucate in demesne; and twenty-five villans, and thirty-three bordars, with one carrucate. There is a new and handsome church, with twenty acres of meadow, and woodland for five hogs in pasnage [pasturage] time. In LONDON are thirteen burgesses at forty-four pence. In the time of king Edward it was valued, as it now is, at fifteen pounds; and the sheriff has twenty shillings. The Earl of Moriton holds one hide, which, in the time of King Edward, and afterwards, was in this manor.'

Independently of the immediate uses of this survey to the Conqueror, it is to this day a record of no small importance to the historian and to the antiquary, for the light it throws on the different classes of persons into which the English people were divided—the different denominations of lands, their culture and measurement—the different denominations of money, and the persons and places that enjoyed the liberty of coinage—territorial jurisdictions and franchises—tenures and services—criminal and civil jurisdictions—ecclesiastical and historical matters therein noticed, besides many curious illustrations of ancient manners, which we have not room to detail.

DOMES'TIC, *n. s.* & *adj.* } Fr. *domestique;* Span. Portug. and Ital. *domestico;* Lat. *domesticus*, from *domus*, a house. See DOMINION.
DOMES'TICAL, *adj.*
DOMES'TICALLY, *adv.*
DOMES'TICATE, *v. a.*

Perhaps the adjective domestic, of or belonging to the house, is here the root; it means also private, and tame. To domesticate is to make as a domestic, to familiarize.

Domestical evils, for that we think we can master them at all times, are often permitted to run on forward, till it be too late to recall them.
Hooker. Dedication.

Equality of two *domestic* powers
Breeds scrupulous faction.
Shakspeare. Antony and Cleopatra.

Next to the sin of those who began that rebellion, theirs must needs be, who hindered the speedy suppressing of it, by *domestick* dissentions.
King Charles.

If the first corruption be not sucked in from the *domestic* manners, a little providence might secure men in their first entrance into the world.
Clarendon.

A servant dwells remote from all knowledge of his lord's purposes: he lives as a kind of foreigner under the same roof; a *domestick*, and yet a stranger too.
South.

Beholding thus, O happy as a queen!
We cry; but shift the gaudy, flattering scene,
View her at home in her *domestick* light,
For thither she must come, at least at night.
Granville.

The practical knowledge of the *domestick* duties is the principal glory of a woman. *Clarissa.*

The faithful prudent husband is an honest, tractable, and *domestic* animal. *Addison's Spectator.*

Probably a philosopher would rejoice in that liberty which Englishmen give their *domestics;* and for my own part, I cannot avoid being pleased at the happiness of those poor creatures, who in some measure contribute to mine. *Goldsmith.*

DOMIFYING, in astrology, the dividing or distributing the heavens into twelve houses, to erect a theme, by means of six great circles, called circles of position. Regiomontanus makes the circles of position pass through the intersections of the meridian and the horizon: others make them pass through the poles of the zodiac. See ASTROLOGY.

DOMINANT, among musicians, is used either as an adjective or substantive; but these different acceptations are far from being indiscriminate. In both senses it is explained by Rousseau as follows:—

DOMINANT, *adj.* The dominant or sensible chord, is that which is practised upon the dominant of the tone, and which introduces a perfect cadence. Every perfect major chord becomes a dominant chord, as soon as the seventh minor is added to it.

DOMINANT, *n. s.* Of the three notes essential to the tone, it is that which is a fifth from the tonic. The tonic and the dominant fix the tone; in it they are each of them the fundamental sound of a particular chord: whereas the mediant, which constitutes the mode, has no chord peculiar to itself, and only makes a part of the chord of the tonic. Rameau gives the name of dominant in general to every note which carries a chord of the seventh, and distinguishes that which carries the sensible chord by the name of a tonic dominant; but on account of the length of the word, this addition to the name has not been adopted by artists: they continue simply to call that note a dominant which is a fifth from the tonic; and they do not call the other notes, which carry a chord of the seventh, dominants, but fundamentals; which is sufficient to render their meaning plain, and prevents confusion.

A DOMINANT, in that species of church music which is called plain chant, is that note which is most frequently repeated or beaten, in whatever degree it may be from the tonic. In this species of music there are dominants and tonics, but no mediant.

DOM'INATE, *v. a.* } Fr. *domain;* Span. Portug. and Ital. *dominio;* Lat. *dominium*, from *domus;* Gr. δομος, a house, ἀ δεμω, to build.
DOMINA'TION, *n. s.*
DOM'INATIVE, *adj.*
DOM'INATOR, *n. s.*
DOMIN'ION, *n. s.*

To prevail over: domination and dominion both signify supreme authority, power, as over a man's own house or territory: a dominator is he who thus rules.

Settynge him on his right half in heuenli thingis aboue ech principat and potestat and vertu and *dominacioun*, and (above) ech name that is named, not oonli in this world, but also in the world to comyng.
Wiclif. Effesies i.

By him were all things created, visible and invisible, whether they be thrones or *dominions*, or principalities or powers. *Col.* i. 16.

Thou and thine usurp
The *domination*, royalties, and rights
Of this oppressed boy. *Shakspeare. King John.*

Jupiter and Mars are *dominators* for this northwest part of the world, which maketh the people impatient of servitude, lovers of liberty, martial, and courageous. *Camden's Remains.*

Conquest and good husbandry both enlarge the king's *dominions:* the one by the sword, making the acres more in number, the other by the plough, making the same acres more in value. *Fuller.*

The Law of Works is that empire and *dominion* which God exercised over man, using his utmost right, and obliging man to the rigorous observation of all that law he should impose upon him.
Bp. Taylor.

He gave us only over beast, fish, fowl,
Dominion absolute; that right we hold
By his donation: but man over man
He made not lord. *Milton.*

Hear, all ye angels, progeny of light,
Thrones, *dominations*, princedoms, virtues, powers.
Id.

What can our travellers bring home
That is not to be learnt at Rome?
What politics, or strange opinions,
That are not in our own *dominions*? *Hudibras.*

I thus conclude my theme,
The *dominating* humour makes the dream.
Dryden.

He could not have private *dominion* over that which was under the private *dominion* of another. *Locke.*

Maximinus traded with the Goths in the product of his own estate in Thracia, the place of his nativity; whither he retired, to withdraw from the unjust *domination* of Opilius Macrinus. *Arbuthnot on Coins.*

Blest use of power, O virtuous pride in kings!
And like his bounty whence *dominion* springs.
Tickell.

Of all the enemies of idleness, want is the most formidable. Fame is soon found to be a sound, and love a dream. Avarice and ambition may be justly suspected of being privy confederacies with idleness, for when they have, for a while, protected their votaries, they often deliver them up, to end their lives under her *dominion*. *Johnson.*

To sit on rocks, to muse o'er flood and fell,
To slowly trace the forest's shady scenes,
Where things that own not man's *dominion* dwell,
And mortal foot hath ne'er, or rarely been.
Byron.

DOMINEER, *v. n.* Fr. *dominer*. See DOMINATE. To rule with absolute authority: hence to swell; bluster.

Go to the feast, revel, and *domineer*,
Carouse full measure.
Shakspeare. Taming of the Shrew.

The voice of conscience now is low and weak, chastising the passions, as old Eli did his lustful *domineering* sons. *South.*

Both would their little ends secure;
He sighs for freedom, she for power:
His wishes tend abroad to roam,
And hers to *domineer* at home. *Prior.*

DOMINGO (St.), HISPANIOLA, or HAYTI, one of the largest and most fertile of the West India islands, and the second in point of size, is situated between Porto Rico on the east, and Jamaica and Cuba on the west. It is approached on its northern side by the southern part of the Bahama chain, while southward the Caribbean sea runs between it and Terra Firma. The extreme length of St. Domingo is generally stated at about 400 miles; Rainsford, however, extends it to 490 miles, and its utmost breadth 150; but a considerable peninsula projects for nearly 140 miles towards the west, and, with a large promontory on the north, forms a spacious bay opposite the island of Cuba. Its medium length may therefore be computed at 300 miles, and its breadth at 100, which gives a superficial area of about 30,000 square miles, equal therefore to that of Ireland. Its most northerly point is in 19° 46′; and its most southerly in 17° 37′ N. lat.; westward its extreme point (Cape Tiberon) is in 74° 15′; and eastward, Cape Engano, its extreme point in this direction, is 67° 35′ W. long. Columbus, who discovered it in his first voyage to the New World, found it known at Cuba as Hayti, signifying, it appears, a highland country; thus the natives also called it, and the name has been revived of late years by the independent black governments who have revolutionised the French portion of the island. This great navigator himself called it, according to Dr. Robertson, Espagnola, or Little Spain; or at first, as other writers say, Isabella, in honor of the queen of Spain. It is, however, best known to European geographers as St. Domingo, the name of the capital of the Spanish part of the island.

St. Domingo, as it existed before the revolution of 1789, is described by the abbé Raynal as abounding in 'delightful vales, where all the sweets of spring are enjoyed, without either winter or summer. There are but two seasons,' he continues, 'in the year, and they are both equally fine. The ground always laden with fruit, and covered with flowers, realises the delights and riches of poetical descriptions. Wherever we turn our eyes, we are enchanted with a variety of objects, colored and reflected by the clearest light. The air is temperate in the day-time, and the nights are constantly cool.' The Spaniards and French were the European masters of this island, until a very recent period; the line of demarcation, between their respective territories, commencing at the river Massacre on the north side, at the head of the bay of Mancenille, and extending to the river Pedernates south. All the country east of this line, being about three-fourths of the island, was claimed by Spain; and all to the westward by France. The French part of the island, of a very irregular figure, comprehended 2,500,000 acres, of which 1,500,000 were in high cultivation previous to 1789.

The coast of St. Domingo is abrupt and rocky, and the navigation of the neighbourhood dangerous: in his course from Cuba to Cape François, Columbus, it is well known, lost the vessel in which he originally sailed from Europe. None of its harbours will admit vessels of considerable burden. On the south side are the bays of St. Domingo, Neyba and Acon, or Acoa. The first has become, of late years, very shallow and full of reefs. The bay of Neyba receives vessels of thirty tons burden; but a river of this name flowing into it, divides itself, before entering the ocean, into various channels, which, changing in the rainy season, perplex the pilot. Acoa Bay has also several small rivers falling into it. The entrance is two leagues across, and it widens inwards to nearly six leagues. On the east side is the capacious port of Caldera, one of the best and safest of the island. On the north-east coast is the Bay of Samana, extending from its southern point, Cape Rafael, to the opposite side or peninsula of Samana, eighteen miles, and enclosed by a bulwark of rocks and sands, the entrance only being left clear, but having a safe and deep channel between the shore of Samana and some detached islands: it receives the rivers Yuna and Cambu after their junction. The former has a course of about 100 miles. This bay is about sixty miles deep, and is surrounded on every side by a fertile country. In Puerto Plata is Balsama Bay, which has only fourteen feet depth of water, and is of difficult navigation,

the entrance being very narrow: the neighbourhood is rich in valuable woods. Batia Ecossaise, or Scots' Bay, is in this direction, but is a dangerous, rocky inlet; and there are several other small harbours and bays on this side of the island. None of the rivers are practicable, even for boats, in the dry season. Eleven leagues east of Port-au-Prince is a salt lake, named Henriquelle, twenty-two leagues in circuit; its water is deep, clear, and bitter, and it abounds in alligators and tortoises of a large size; in it is an island, two leagues long, abounding with wild goats, and having a spring of fresh water.

The independent portion of St. Domingo (the former French part), is mountainous and well-wooded, containing mines of silver and iron. Much of the central part of the Spanish territories is also composed of elevated mountains, many of them capable of cultivation, and having a soil extremely rich. They also have yielded gold and silver. From the city of St. Domingo several wide plains, from twenty to twenty-five miles in breadth, stretch for about eighty miles to the east. They are called the Los Llanos, and are adapted to the growth of every tropical production. A beautiful valley to the north of these, through which the river Cotu flows, is said to be still more productive. The mountains are principally composed of two parallel chains, running from east to west, with several collateral branches. Excellent timber abounds throughout the mountains. In those of Cibao originate the principal streams of the island; and the influence of these lofty ranges, in mitigating the winds and cooling the atmosphere, is most important in this climate. Some of them rise to the height of 6000 feet above the level of the sea.

Such, according to Edwards, is the unrivalled fertility of the plains of this island, that they are alone capable of producing more sugar and other valuable commodities than all the British West Indies put together. Common attention to their decided advantages was alone wanting in the Spanish colonists to render this one of the most important possessions of that crown. But when, by the arts of cruelty and oppression, they had extirpated the aboriginal inhabitants, many of them became speculators in adventures to South America; while those who remained sunk into such wretched indolence, as to suffer this beautiful part of the country to become a luxuriant wilderness. The Savannahs, and fine plains in the interior, became, in consequence, entirely occupied by wild animals, such as swine, horses, and horned cattle; and herds of domestic animals ran wild in every direction. The export of those animals to the French settlements of the neighbourhood, formed an important branch of commerce to the Spaniards; and it was in exchange for them chiefly that they received the manufactures of Europe.

The climate is moist, hot, and unhealthy to Europeans; the thegmometer in the plains rising as high as 99°; and in the higher parts to 72° and 77°. But these heats are moderated by the regular sea-breeze, which sets in about ten in the morning, and which is succeeded, towards the evening, by a land breeze. The heaviest rains of the wet season fall in May and June; and so impregnated with moisture is the atmosphere at this season, that the brightest metallic polish becomes tarnished; the brooks now swell into torrents, and not seldom overwhelm the adjacent plantations. From time immemorial the inhabitants of the dryer parts of the island have reserved a portion of these copious streams by an artificial irrigation. The sea-coast is said to be more unfavorable to European constitutions than the interior. On the northern coast severe gales are felt, but the violent hurricanes of other parts of the West Indies seldom blow here; when they occur, it is chiefly on the southern coast, where they are denominated southern gales.

St. Domingo is chiefly valuable for its vegetable productions. The useful and elegant mahogany-tree here grows to a noble size and is of very superior grain. The largest of its plants is the cotton-tree, whose stem often furnishes the entire body of the Indian canoes: the pine is also abundant; and here is a species of oak, resembling the American, which yields planks of from sixty to seventy feet long. Brasil, satin, and various hard and ornamental woods are also found. Sugar, coffee, and cotton, of a fine quality, are produced in abundance. Indigo was once cultivated, but it has been long since abandoned. Vanilla grows spontaneously in the woods, and the plantain, also, is abundant. Flowers are numerous, and are distinguished both by their beauty and fragrance: all the tropical fruits are produced in high perfection.

The only indigenous quadruped remaining is the agouti cat, called by the natives heetia. But the stock of horned cattle, horses, mules, asses, sheep, and goats, is prodigious. Many of the cattle, as we have stated, run wild, and are the prey of any one who will pursue them: some farmers of the interior own 10,000 or 12,000, worth from six to eight dollars a head: the horse is here very sure-footed, and useful, but of small size and inferior paces. The whole number of horses, mules, and asses, both the latter being valuable breeds, is estimated at 150,000; the horned cattle at 300,000.

Birds are numerous, particularly wild fowl; but the Jamaica nightingale, or mocking-bird, and the banana, are the only songsters. The flesh of the wild pigeon is particularly savory, though somewhat bitter; the parrot is also eaten, and ortolans are numerous. The best fish of the rivers are the mullet, snook, calapever, pargo, grooper, baracooter, craw and rock-fish, and particularly the land-crab. Turtle abounds on the coast, and immense quantities of tarapins, together with a small species of amphibious tortoise, which is a very delicate and luxurious food.

The serpent tribes, though numerous, are not venomous, but the centipede is very annoying. A venomous crab-spider is also found here; the destructive white-ant, and abundant swarms of insects. This ant will eat through any kind of packing box, from side to side, and penetrate every fold of goods.

The aborigines of St. Domingo have been long since extirpated by the Spaniards. When it was discovered by Columbus, 9th of December, 1492, it formed five kingdoms, called Maqua,

Marien, Higuay, Maguana, and Xaraguay, each governed by its own cacique. The Spaniards had possession of the whole of it for 120 years. This island, their earliest settlement in the new world, was at first in high estimation for the quantity of gold it supplied. But its wealth diminished with the inhabitants of the country, whom they obliged to dig it out of the bowels of the earth; and the source of its wealth was entirely dried up, when they were extinct. Benzoni relates, that of 2,000,000 of inhabitants, contained in the island when discovered by Columbus in 1492, scarcely 153 were alive in 1545. Bishop Las Casas makes the extermination of the natives by his countrymen still greater and more rapid. He states the original number at 3,000,000, and says they were reduced to 60,000 within fifteen years. A vehement desire of opening again this source of wealth first inspired the thought of obtaining slaves from Africa; but, besides that these were found unfit for the labors they were destined to, the multitude of mines, then beginning to be wrought on the continent, made those of St. Domingo no longer of any importance. An idea now suggested itself, that the negroes, who were healthy, strong, and patient, might be usefully employed in husbandry. The produce of their industry was at first extremely small, because the laborers were few. Charles V. had granted an exclusive right of the slave trade to a Flemish nobleman, who made over his privilege to the Genoese. These avaricious republicans conducted this infamous commerce as all monopolies are conducted: they resolved to sell dear, and they sold but few. When time and competition had fixed the price of slaves, the number of them increased. It may easily be imagined that the Spaniards, who had been accustomed to treat the Indians as beasts, did not entertain a higher opinion of these unfortunate Africans, whom they substituted in their place. Degraded still farther in their eyes by the price they had paid for them, even religion could not restrain them from aggravating the weight of their servitude. They made frequent attempts, however, to recover the undeniable rights of mankind, and thus procured somewhat better treatment. The cultivation of the island was, at times, therefore, pursued with tolerable success About the middle of the sixteenth century, Spain drew annually from this colony 10,000,000 weight of sugar, a large quantity of wood for dyeing; tobacco, cocoa, cassia, ginger, cotton, and peltry in abundance. One might imagine, that such favorable beginnings would have given both the desire and the means of carrying them further; but a train of events, more fatal each than the other, ruined these hopes. The first misfortune arose from the depopulation of the island. The Spanish conquests on the continent should naturally have contributed to promote the success of an island, which seemed to have been formed to be the centre of that vast dominion arising around it. But it fell out quite otherwise: on a view of the immense fortunes raising in Mexico, and other parts, the richest inhabitants of Hispaniola began to despise their settlements, and the government endeavoured in vain to put a stop to emigration: the laws were always either artfully eluded, or openly violated. The weakness, which was a necessary consequence of such conduct, leaving the coasts without defence, encouraged the enemies of Spain to ravage them. See our article Buccaniers. Even the capital of this island was taken and pillaged by Sir Francis Drake. Cruizers of less pretensions contented themselves with intercepting vessels in their passage through those latitudes, which were the best known at that time of any in the new world To add to these misfortunes, the Spaniards themselves commenced pirates. They attacked no ships but those of their own nation; which were more rich, worse provided, and worse defended, than any others. The custom they had of fitting out ships clandestinely, to procure slaves, prevented them from being known; and the assistance they purchased from the ships of war, commissioned to protect the trade, insured to them impunity. The foreign trade of the colony was its only resource in this distress; and that was illicit: but as it continued to be carried on, notwithstanding the vigilance of the governors, or, perhaps, by their connivance, the policy of an exasperated and short-sighted court exerted itself in demolishing most of the sea-ports, and driving the miserable inhabitants into the inland country. This act of violence threw them into a state of dejection, which the incursions and settlement of the French on the island afterwards carried to the utmost pitch. The latter, after having made some unsuccessful attempts to settle on the island, had part of it yielded to them, in 1697, by the Spaniards. The court of Spain, totally taken up with that vast empire which they had formed on the continent, used no pains to dissipate this lethargy. They even refused to listen to the solicitations of their Flemish subjects, who earnestly pressed that they might have permission to clear the fertile parts of this island. Rather than run the risk of seeing them carry on a contraband trade on the coasts, they chose to bury in oblivion a settlement which had been of considerable consequence, and was likely again to become so. This colony, which had no longer any intercourse with the mother country but by a single ship, of no great burden, that arrived hence every third year, consisted, in 1717, of 18,410 inhabitants, including Spaniards, Mestees, Negroes, and Mulattoes. The complexion and character of this population differed according to the different proportions of American, European, and African blood they had received from that natural and transient union, which restores all races and conditions to the same level. Demi-savages, in fact, the greater part of them plunged into extreme sloth, lived upon fruits and roots, or dwelt in cottages without furniture, and most of them without clothes. The few among them, in whom indolence had not totally suppressed the sense of decency and taste for the conveniences of life, purchased clothes of their neighbours, the French, in return for their cattle, and the money sent to them for the maintenance of 200 soldiers, the priests, and the government. A century after its original settlement it was found necessary to remit annually from Mexico 300,000 dollars, for the sup-

port of the local government of this colony. Nor did the company formed at Barcelona, in 1757, with exclusive privileges for the re-establishment of St. Domingo, ever make any considerable progress. They only sent out two small vessels annually, which were freighted back with 5000 hides, and other commodities.

The Spanish government was, however, roused to some exertions in favor of St. Domingo at the close of the last century. Settlers were encouraged to come hither from the Canary Islands, the monopoly imposed on its trade was relaxed, and encouragements were held out to agriculture and commerce. Under the influence of these measures the colony began to improve, the towns and villages were rebuilt and peopled, new plantations were laid out, and the trade with the French part of the island became considerable. At the period of the French revolution, in 1789, the Spaniards had twenty-four sugar-works in St. Domingo. They paid with raw sugar, hides, timber, and piastres for the small number of cargoes they received from Europe. Besides 11,000 heads of cattle, they furnished the French part of St. Domingo with horses, mules, and some tobacco. Next to the ancient city of St. Domingo, their principal towns were Monte Christi, La Vega, St. Jago, Zeibo, St. Thomé, Azua, and Isabella.

This part of the island was ceded formally to France by the treaty of Basle, July 22nd, 1795: but it was not taken possession of by that power until 1801, when the unfortunate Toussaint L'Ouverture appeared before the capital at the head of a considerable French force. At this period it is said 25,000 of the inhabitants emigrated to Cuba, South America, or other of the Spanish settlements, so averse were they to the French yoke. At the close of 1808 attempts to expel the French were openly made: in November the French commander was shut up in the capital; but it was not until July of the following year that he surrendered, when a British armament, under General Carmichael, came to the aid of the Spaniards. Since this period they have declared their independence of the mother country, and offered their allegiance to the new republic of Colombia. At the period of its cession to France, the Spanish part of St Domingo had 125,000 inhabitants, 110,000 of whom were free people, and 15,000 negro slaves. Land was at six French livres, or five shillings the arpent; and labor at two French livres, sixty-one centimes, or a little better than two shillings per day. Walton estimates the inhabitants of this part, in 1810, at 104,000. We have seen that there had been a considerable emigration, which he excludes from this amount.

We have noticed the visits, and, under that article, the settlement, of the BUCCANIERS, in St. Domingo. That part of this singular community, which abandoned the sea for its fertile valleys, consisted principally of Frenchmen, and became acknowledged subjects by the government of France at the close of the seventeenth century. In 1669 the planters here amounted to upwards of 1500; Bertrand Dogeron, a man of considerable talents and probity, having been deputed to form them into a regular colony. In 1670, however, the oppressive measures of the French West India Company caused the inhabitants of this part of St. Domingo to revolt: and tranquillity was only restored at the price of a free trade to France, subject to a duty of five per cent. paid to the company on the arrival and departure of all vessels.

Under the excellent management of Dogeron the colony continued to prosper; but after his death, in 1673, it languished under the monopoly of exclusive trading companies. Three years before his death the town of Cape François had been founded by Gobin, a French Protestant, whom the persecutions of Louis XIV. had driven from his native land. In 1688, several slaves having been taken from the English, the inhabitants of St. Domingo began to turn their attention to the culture of the sugar-cane. With this view they increased their stock of negroes, and in 1694, taking advantage of the misfortunes which had befallen the English colony of Jamaica, they effected a landing in that island, and carried off a considerable number of slaves. The English, in their turn, attacked the settlement of Cape François in the following year, which they plundered and reduced to ashes. It was, however, soon rebuilt. At the peace of Ryswick, the French obtained the first regular cession of the western part of St. Domingo, and in 1702, Port-au-Prince was made the seat of the government, but the town of the cape continued in every other respect the capital of the colony. The French in St. Domingo flourished as the Spaniards decayed. Their colony, which in the time of Herrera counted 14,000 Castilians, besides a proportional number of other inhabitants, had, in 1717, only 18,410 individuals of every description; whilst, according to the abbé Raynal, the produce of the French colony, in 1720, amounted to 1,200,000 lbs. of indigo, 1,400,000 lbs. of white sugar, and 21,000,000 lbs. of raw sugar. From 1722, when the French colony of St. Domingo was freed from the yoke of exclusive trading companies, it rose gradually to the highest pitch of prosperity. In the year 1754, the value of the various commodities of the colony was £1,261,469 sterling, and the imports from the mother country £1,777,509 sterling. There were 14,000 white inhabitants, 4000 free mulattoes, and upwards of 172,000 negroes; 599 sugar plantations, 3379 of indigo, 98,946 cocoa trees, 6,300,367 cotton plants, and nearly 22,000,000 cassia trees; 63,000 horses and mules, 93,000 heads of horned cattle, 6,000,000 banana trees; upwards of 1,000,000 plots of potatoes, 226,000 plots of yams; and nearly 3,000,000 trenches of manioc.

In 1789 the prosperity of the French part of St. Domingo was at its greatest height. It was divided into the northern, western, and southern provinces. The first extended about forty leagues along the northern coast, from the river Massacre to cape St. Nicholas, and contained, inclusive of the island of Tortuga, twenty-six parishes. The principal towns were Cape François, Fort Dauphin, Port de Paix, and Cape St. Nicholas. The western province commenced at this cape, and terminated at Cape Tiburon. It contained fourteen parishes; its chief towns were Port-au-

Prince, St. Marc, Leogane, Petit Goave, and Jérémie. The southern province occupied the remaining coast from Cape Tiburon to l'Anse-à Pitre, and contained ten parishes and two towns, Cayes and Jacmel. The cultivated land amounted to 2,290,000 English acres, or 771,275 carreaux of French measurement, 350 feet on every side to the carreau. But Barbé Marbois, in his Compte rendu des finances de St. Domingue, en 1789, reckons the cultivated land at 570,210 carreaux only. There were 792 sugar plantations, 2810 coffee plantations, 705 cotton plantations, 3097 indigo plantations, sixty-nine cacao plantations, and 173 distilleries of rum. The produce of these plantations, in 1788, consisted of 163,405,500lbs. of sugar, 68,151,000 lbs. of coffee, 6,289,000 lbs. of cotton, 930,000 lbs. of indigo, 150,000 lbs. of cacao, 34,453,000 lbs. of syrup, worth in all, with some less important articles, 135,763,000 French livres. It was sent to France in 686 vessels of 199,122 tons. The goods imported into the colony from different ports of France, in 465 vessels of 138,624 tons, amounted to the value of 54,578,000 French livres. Before the revolution, the exportation from the whole island employed 1070 vessels, navigated by 7936 seamen.

The population consisted in 1788, according to Marbois, of 27,717 white inhabitants, of whom there were 14,571 males, 4482 females, and 8664 children; of 405,564 negro slaves, of whom there were 174,971 males, 138,800 females, and 91,793 children; and of 21,808 free people of color.

Soon after 1789 a most dreadful reverse took place. At this period, says Mr. Bryan Edwards, in his Historical Survey of the French Colony in St. Domingo, London, 4to. 1797, 'the mulattoes were in a situation more degrading and wretched, than that of the enslaved negroes in any part of the West Indies. No law allowed the privileges of a white person to any descendant of an African, however remote.'—'The laws, he adds, were dreadfully unequal.' In such a situation it is not to be wondered at, that they should have listened with pleasure to the news of the French revolution, and to the acts of the assembly, which abolished slavery, and established equality of rights. A colonial assembly met at St. Mark, on the 16th of April, 1790, composed of 213 members, which, says Mr. Edwards, 'fairly and fully represented the inhabitants.' 'They passed acts of indulgence, and rectified gross abuses. But persons interested in the continuance of these abuses were displeased. They counteracted the proceedings of the assembly, and misrepresented their intentions. M. Peynier, the governor, attempted to restore the old despotic system: whereupon eighty-five members of the assembly embarked for France;' as did also M. Peynier, who resigned in November 1790. 'The pride of power,' adds this writer, 'the rage of reformation, the contentions of party, and the conflict of opposing interests, now produced a tempest, that swept every thing before it.' In October, 1790, James Oge, a free mulatto, who had been at Paris, and who is characterised by Mr. Edwards, as 'an enthusiast for liberty, but mild and humane,' returned from France, and put himself at the head of the insurgent negroes and people of color; but being defeated, in March 1791, was betrayed by the Spaniards, to whom he had fled for refuge, and, with Mark Chavane his lieutenant, broke alive on the wheel. The eighty-five members of the colonial assembly were arrested in France, and their act of the 12th of October 1790, annulled. In March, 1791, 8000 troops arrived from France; and Mauduit the new governor was murdered by his own soldiers, with circumstances of horrible barbarity. By a decree of the National Assembly, of the 15th of May 1791, people of color were declared eligible to seats in the colonial assembly. And on the 11th of September, a concordat, or truce, was signed between the whites and mulattoes. 'But the operation of this truce,' says Edwards, 'was destroyed by the absurd decree of the national assembly of the 24th of September, repealing the decree of the 15th of May, whereby in the very moment when the justice and necessity of this decree were acknowledged, and its faithful observance promised by the colonial assembly, its repeal was pronounced by the legislative assembly in the mother country. To such repugnancy and absurdity must every government be driven, that attempts to regulate and direct the local concerns of a country 3000 miles distant. Open war in all its horrors was now renewed. All the workings of humanity were absorbed, in the raging and insatiable thirst of revenge, which inflamed each class alike. It was no longer a contest for mere victory, but a diabolical emulation which party could inflict the most abominable cruelties on the other.' On the 23d of August, 1791, Cape François was burnt, and in the space of two months it was computed, that upwards of 2000 white persons perished by these horrible massacres; and that of the mulattoes and negroes not fewer than 10,000 died by famine and the sword, besides several hundreds that suffered by the executioner. Meantime citizens Santhonax, Polverel, and Ailhaud, arrived from France as commissioners, accompanied by 6000 of the national guards; and citizen Galbaud was appointed governor. Their attempts, however, to stop these enormities proved fruitless, though they proclaimed the total abolition of slavery, and a general indemnity.

In October, 1793, a body of British forces under colonel Whitlock, were landed, and took possession of Tiburon, Treves, Jérémie, Leogane, Cape Nicolas Mole, and upwards of ninety miles of the eastern coast with little opposition. But though the loss of the British in these engagements, or rather skirmishes, did not exceed 100 men, yet the victims of disease, within six months after their arrival, were upwards of 6000, among whom were 150 officers. Leogane was soon after retaken by the negroes, who now amounted to above 100,000, under their general Toussiant l'Ouverture; and Tiburon was taken by the French under general Rigaud. To remedy these disasters, and to supply the Mole with provisions, an expedition was undertaken against the fort of Bombarde, but the reduction of it (which was not accomplished till the 18th of June 1796) cost an immense number of men, and after it was taken, instead of being able to supply

the Mole, it was found necessary to supply it from thence, at a vast expense, and with the loss of many brave troops. These and similar losses, with the deaths of lieutenant colonels Brisbane and Markham, who were killed in 1795, together with the faithlessness of the French emigrants, upon whose suggestions this expedition had been undertaken, at last determined the British commander to surrender Jeremie, Port au Prince, and Cape Nicolas Mole, the only places remaining in the hands of the British, to general Hedonville, by capitulation in August 1798; and on the 1st of October the island was totally evacuated by the British. The name of Port au Prince was at this time changed to Port Republicain; and the Spanish part of the island, having been ceded to the French by treaty was taken possession of, as we have already intimated, by l'Ouverture. We must refer our readers to the life of this chieftain in another part of our work, for the detailed proofs of his very superior talents and character. He applied himself at this period to heal the wounds of this his native country with the greatest success; and such was his popularity, that though the commissioners, who had been sent out by the French directory, remained in the island, and were treated with every external mark of respect, they were, in fact, mere cyphers, destitute of influence, and dependent on Toussaint for support.

Agriculture and commerce were the first objects of his care. Many of the planters were restored to their former estates, but no property in human beings was allowed. The blacks, however, were not permitted to waste their lives in idleness. The planters were obliged to employ their laborers as hired servants, and a third part of the crops was assigned for their remuneration. While ample encouragement was afforded to industry, penalties were at the same time denounced for the punishment of idleness. The beneficial effects of such an administration were soon visible. The wasted colony began to revive; the plantations were again brought into a fertile state; the sugar-works and distilleries were rebuilt; the ports were opened to foreign vessels; and, notwithstanding the ravages of a ten years' war, the exports of St. Domingo were raised from the lowest ebb to one-third of their former amount and value in the most prosperous periods. Population also increased with astonishing rapidity; and while the planters of the neighbouring West-India Islands were continually urging the necessity of annual importations from Africa, to supply the constant diminution among the negroes, in St. Domingo their numbers were considerably augmented, notwithstanding the waste of blood during the troubles and sanguinary conflicts of the ten preceding years. The churches were re-opened, public worship was restored; the elegant arts and amusements of civilised life began to resume their sway; and the combined result of all these causes was a visible and striking improvement in every class of society. In the intercourse of the social hour, all were on a perfect equality; thus presenting a striking contrast to the very strict subordination which prevailed in the army.

The military establishment, when the British forces evacuated the island in 1798, did not exceed 40,000; but in two years it was more than double that number. The soldiers regarded Toussaint as an extraordinary being: his generals trembled before him (Dessalines durst not look him in the face); and every one trembled before his generals. No European army, indeed, was ever subject to a more rigorous discipline, than that which was observed by the troops of Toussaint. Every officer commanded, pistol in hand; and had the power of life and death over the subalterns. 60,000 men were frequently reviewed and exercised together on the plain of the Cape. On these occasions 2000 officers were seen in the field, carrying arms, from the general to the ensign, yet with the utmost attention to rank; without the smallest symptom of the insubordination indulged in the leisure of the hotel. Each general officer had a demi-brigade, which went through the manual exercise with a degree of expertness seldom witnessed; and performed equally well several manœuvres applicable to their method of fighting. At a whistle a whole brigade would run 300 or 400 yards, then, separating, throw themselves flat on the ground, changing to their backs or sides, keeping up a strong fire the whole of the time, till they were recalled: then they would form again, in an instant, into their wonted regularity. This single manœuvre used to be executed with such facility and precision, as totally to prevent cavalry from charging them in bushy and hilly countries. Such complete subordination, such promptitude and dexterity, prevailed the whole time, as would have astonished any European soldier who had the least knowledge of their previous situation. (History of St. Domingo, 1818.)

'In these reviews,' says M. de la Croix, 'Toussaint appeared like an inspired person, and became the fetiche or idol of the blacks who listened to him. In order to make himself better understood, he frequently addressed them in parables, and often made use of the following:—In a glass vessel full of grains of black maize, he would mix a few grains of white maize, and say to those who surrounded him:—'You are the black maize; the whites, who are desirous of enslaving you, are the white maize.' He would then shake the vessel, and presenting it to their fascinated eyes, exclaim, 'See the white here and there!' in other words, see how few the white are in comparison of yourselves.' The gleam of prosperity, however, which resulted from his wise administration, was of short continuance.

The independence of St. Domingo was proclaimed on the 1st of July, 1801; and, while the inhabitants were indulging the hope of future happiness, a storm was gathering, which burst upon them with accumulated fury. Scarcely was the peace of Amiens concluded, when a formidable armament of twenty-six ships of war was equipped by order of the first consul, with the determination of reducing the revolted colony of St Domingo. On board this fleet were embarked 25,000 chosen troops, amply furnished with all the apparatus of military slaughter. The better to ensure success to the expedition (the

chief command of which was confided to general Le Clerc, the brother-in-law of Buonaparte), recourse was first had to perfidious means. Attempts were made to sow disunion among the free people of St. Domingo. Proclamations and letters, expressed in all the delusive jargon of the republic, were widely circulated. The chiefs of both colors, then in France, and the two sons of Toussaint himself, who had sent them thither for instruction, were pressed into the service of this expedition.

The French forces arrived in January, 1802; yet so little did Toussaint expect to have any enemy to combat, that he had given no orders for resistance in case of attack. When the French squadron was descried, he was making a tour round the eastern part of the island: and, if some of the generals resisted, it was only in consequence of the menaces and hostile manner in which they were summoned to surrender.

After his troops had disembarked, and previously to commencing operations in the interior of the country, and perhaps in the hope that the sight of so formidable a force would inspire the Haytians with terror, Le Clerc thought proper to try what effect these circumstances, the sight of his two sons, and a specious letter from Buonaparte, would produce upon Toussaint. Coisnon, their tutor, who had accompanied them from France, and was one of the chief confidential agents in this expedition, was accordingly deputed on this errand, with instructions to press Toussaint's instant return to the Cape, and to bring back the children in case he should not succeed. When he reached Eunery, Toussaint's country residence, that chief was absent in a distant part of the island, whence he did not return till the second day. The wily Frenchman availed himself of this delay to work upon the feelings of their mother; whose tears, and the solicitations of the children, for a while shook the resolutions of Toussaint. Being at length confirmed in his suspicions of the snare that had been laid for him, by the conduct and language of Coisnon, Toussaint suddenly composed his agitated countenance; and, gently disengaging himself from the embraces of his wife and children, he took their preceptor into another apartment, and gave him this dignified decision:—'Take back my children; since it must be so, I will be faithful to my brethren and my God.' Unwilling to prolong the painful scene, Toussaint mounted his horse, and rode to the camp. A correspondence was subsequently opened with him by Le Clerc, but it failed to produce Toussaint's submission.

Le Clerc now proceeded to hostilities, the minute circumstances of which we have not room to detail. It must therefore suffice to state, that the numbers and discipline of the French troops, added to the military skill of their commanding officers, overpowered all open resistance in the field, so that the blacks, after several obstinate conflicts, and after the burning of several of their principal towns, were finally compelled to retire into the inaccessible fastnesses of the interior, whence they carried on, under their brave chieftain, Toussaint, a desultory, but destructive, warfare against detached parties of their enemies. This mode of fighting was dictated by the nature of their country. They would frequently place whole lines in ambush, sometimes reaching from one part to another, and sometimes extending to a considerable distance from each wing of a camp. By their admirable discipline, and astonishing celerity, their enemies were often disconcerted, and thrown into disorder; and sometimes, when the French thought themselves sure of a victory, detachments in ambush suddenly made their appearance, and mortified them with a defeat. At length, however, the negroes and cultivators were either subdued by the terror of the French army, or cajoled by the deceitful promises of the French general, who had published in his own name, and in that of the first consul, repeated solemn declarations, that the freedom of all the inhabitants of St. Domingo, of all colors, should be preserved inviolate. But elated by his successes, he now threw aside the mask, and issued an order, expressly restoring to the proprietors or their attorneys, all their ancient authority over the negroes upon their estates. This order opened the eyes of the negro population. Toussaint, descending from his fastnesses with several hundred men, effected a junction with Christophe, who was at the head of three hundred, and marched rapidly to the north of the island. Wherever he came, he summoned the cultivators to arms, multitudes of whom flocked to his standard. His force speedily became formidable: they drove in the enemy's posts in all directions, and surrounded the town of Cape François, within whose walls they had taken refuge. To save that place from being stormed by the infuriated black troops, Le Clerc was obliged to abandon all his conquests in other parts of the island, and hasten by forced marches to its relief. Sensible of his precipitancy in throwing off the mask, he again had recourse to his former acts; and having issued a proclamation couched in the most specious terms, the black chieftains, who were weary of the war, and whose troops began to quit the ranks, agreed to lay down their arms, on condition of a general amnesty, and the preservation of their own rank, and that of their officers.

Scarcely had the French thus succeeded in extending their dominion over the whole island, when they began to put in execution their frightful system of slavery and destruction; and, as a preliminary step towards this object, Le Clerc caused Toussaint to be privately seized, in the dead of the night, together with his family, and embark for France, on board a fast-sailing frigate, about the middle of May, 1802. He was kept a close prisoner on the voyage, and heard of no more by his countrymen. See L'Ouverture.

To justify this base act of treachery, Le Clerc accused Toussaint of having intended to excite an insurrection among the working negroes, and to raise them in a mass. The only proof alleged by the French general was two intercepted letters, said to have been written by him to his aid-de-camp Fontaine. M. de la Croix (who was an officer in the army of Le Clerc) has printed one of these letters as genuine: the manifesto addressed to the sovereigns of Europe by Christophe, on his accession to the throne of Hayti, affirms it

to be a forgery; and such is the opinion of M. de Gastine, who observes further, that the pretended letters not only do not prove that Toussaint was preparing to take up arms again, but that every thing concurs to prove that they were forged, otherwise the French would have tried him before a special commission, instead of transporting him 2000 miles from his country, in defiance of the law of nations and of humanity.

The base treachery of Le Clerc aroused the black chieftains, and opened the eyes of their countrymen to the designs of the French. Dessalines, Christophe, and Clerveaux, again raised their standards, and were soon found at the head of considerable bodies of troops, ready to renew the struggle for liberty, and determined to succeed or perish in the attempt. During the latter half of the year, 1802, actions were fought with various success. And though the French were continually receiving fresh supplies of men, yet these did not suffice to supply the place of those who perished by the sword and by sickness. Their hospitals were crowded with sick, and disease daily made new ravages. At length Rochambeau, who had succeeded to the chief command on the death of Le Clerc, was compelled by Dessalines to evacuate Cape François, where the remains of the French army were surrounded; and, as the war had then recommenced between Great Britain and France, the French gladly surrendered themselves prisoners of war to a British squadron, and were conveyed to this country. We shall not harrow up the feelings of our readers by a recital of the refined cruelty and savage barbarity practised by the French during this residence of twenty-one months on the island of St. Domingo. According to the returns which have been subsequently made to the Haytian Government, more than 16,000 negroes and people of color perished under the various tortures inflicted by them. The barbarities committed by these modern conquerors upon the children of Hayti far exceeded indeed the crimes of the Pizarros, Cortez, and the Bovadillas, those early scourges of the New World.

The French being expelled, at a general meeting of the National Assembly, on the 1st of January, 1804, the independence of the island was again proclaimed; the aboriginal name of Hayti was resumed, and the Haytians pronounced the oath to die free and independent, and never again to submit to any foreign domination whatever. Dessalines was elected governor-general for life, which title, a few months afterwards, he exchanged for that of emperor, being crowned by the style of Jacques I. But his reign was of short duration; the cruelties he perpetrated caused a conspiracy to be formed against him; and, two years after his coronation, he was surrounded by the conspirators at his head-quarters, and, struggling to escape, received a wound, which terminated his life. His death produced a division of St. Domingo, and another civil war.

In the north, Christophe assumed the reins of government, with the modest designation of chief of the government of Hayti; while Pétion, a mulatto, asserted his claim to sovereign power. For several years these rival chieftains carried on a sanguinary contest, with various success on both sides, until the year 1810, when hostilities were suspended; and, though no formal treaty was concluded, the country long enjoyed the blessings of peace. Christophe was crowned king of Hayti in March 1811, by the title of Henry I.; and Pétion, as president of the republic of Hayti, governed the southern part until 1818, when he died, and was succeeded by general Boyer, whom he was allowed to nominate his successor.

Both governments encouraged agriculture as the basis of their national prosperity, and displayed a laudable solicitude for the instruction of the rising generation. Christophe examined the rival claims of the two systems of mutual instruction practised in England, and gave the preference to that of the British and Foreign School Society. Schools, under the care of English teachers, were established in his dominions at Cape Henry, Sans Souci, Port de Paix, Gonaives, and St. Marc. In the primary schools, the instructions are principally given in English.

In the republican part of the island, a school was established at Port-au-Prince, on the British and Foreign Society's plan, by an English teacher, to whose conduct and ability the president, general Boyer, has borne the most honorable testimony. This school is under the superintendence of a native teacher. A lyceum has likewise been instituted for teaching the higher branches of literature and science.

Christophe, in imitation of other monarchs, created various orders of nobility, together with numerous officers of state, each of whom had a fixed order of precedence, according to the supposed dignity of their office. His dynasty, however, was like his predecessor's, but short-lived. In 1820 a successful conspiracy was formed against him, and finding himself surrounded by an overwhelming force, he committed suicide. See CHRISTOPHE. The president of the republic, Boyer, now advanced upon the kingdom, and succeeded, with but little opposition, in adding it to the republic of Hayti.

The population of the two Haytian governments, in 1820, was computed to be about 501,000, viz.:—

Blacks . . .	480,000
Persons of color . .	20,000
Whites . . .	1,000
	501,000

Of this number, 261,000 were in the republican part, and 240,000 in the kingdom of Christophe. The introduction of vaccination has greatly facilitated the increase of population.

The revenues of the two governments are supposed to be about 48,000,000 francs; and the expenses of their administration, in 1817, scarcely exceeded 18,000,000 francs, thus leaving a surplus of 15,000,000 at the disposal of each.

The Catholic religion is declared to be that of both divisions of the island; the hierarchy of the northern part consists of an archbishop, three bishops, and a rector in each parish. At Sans Souci there is a royal and parochial church.

It was erected by Henry, and was mentioned in the royal almanack as 'a monument of his royal munificence and piety.' The archbishop, whom the pope has hitherto refused to consecrate, has a chapter, a seminary, and a college attached to the metropolitan see, all well endowed. He has also three archi-episcopal palaces assigned to him; and the bishops have each a chapter and a seminary, endowed with considerable revenues.

The armies of the two governments, in 1820, were composed of about 24,000 regular troops each; but not more than 5000 or 6000 were on duty at one time. They were relieved alternately every three months; and received pay while on actual service. During the remaining nine months of the year, they were quartered upon the great provision-grounds of the two governments. Since the revolution, commerce is said to have greatly declined. From 1804 to 1808, according to Walton, only about seventy-five vessels arrived annually, with cargoes amounting to about £150,000 sterling.

The Haytians express themselves with great energy and propriety, on moral and political subjects. Some of the state-papers of the late king might vie with those of far more advanced communities. 'Five-and-twenty years ago,' says the black baron de Vastey, in his Political Reflections, printed at the press of Sans Souci, 'we were plunged in the most complete ignorance; we had no notion of human society, no idea of happiness, no powerful feeling; our faculties, both physical and moral, were so overwhelmed under the load of slavery, that I myself, who am writing this, I thought that the world finished at the spot which bounded my sight; my ideas were so limited, that things the most simple were to me incomprehensible, and all my countrymen were as ignorant, and even more so than myself, if that were possible. I have known many of us,' he continues, 'who have learned to read and write of themselves without the help of a master; I have known them walking with their books in their hands, enquiring of the passengers, and praying them to explain to them the signification of such a character or such a word, and in this manner many, already advanced in years, became able to read and write without the benefit of education. Such men,' he adds, 'have become notaries, attornies, advocates, judges, administrators, and have astonished the world by the sagacity of their judgment; others have become painters and sculptors from their own exertions, and have astonished strangers by their works; others again have succeeded as architects, mechanics, weavers; in short, others have worked mines of sulphur, fabricated saltpetre, and made excellent gunpowder, in mills and establishments similar to those of Europe, with no other guides than books of chemistry and mineralogy. And yet,' he continues, 'the Haytians pretend not to be a manufacturing and commercial people'—'like the Romans, we go from arms to the plough, and from the plough to arms.' But he contemplates the time when they shall call to their assistance the mechanical arts, the employment of machines, of animals, and of the natural agents, air, fire, and water, and put in practice those means, 'which,' says he, 'will render our country the most beautiful, populous, and flourishing, and its inhabitants, heretofore so unfortunate, the happiest people in the world.'

In July 1816, after Louis XVIII. was restored to the throne, commissioners were sent from France to St. Domingo, entrusted with the administration of all the affairs of the island, both civil and military, but all their overtures were firmly rejected in both parts of the island. His majesty Charles X. has been more successful in asserting the claims of France to this island. He has procured that kind of recognition of the interest of the former planters, which has resulted in a treaty of indemnity in regard to them, whereby the French government stipulates to acknowledge the independence of Hayti, which is on the other hand to pay a sum of money to France, and give certain advantages to the French commerce above that of other nations.

We conclude with the excellent reflections of a modern periodical publication. 'The establishment of a black empire in the midst of the British West Indies,' observes this writer, 'excited the most fearful apprehensions in the minds of the planters. Subsequent events have shown that, however well founded those apprehensions might seem, they have little to fear, so long as their slaves are treated with kindness and humanity. The abolition of the nefarious traffic in slaves, and other wise measures of the British legislature, have already contributed to ameliorate the condition of the slaves; aad we may reasonably expect that, in proportion as these measures have their full effect, the condition of the negroes in our West-India colonies will be progressively improved. In their present state entire freedom would be no boon to them. Nothing indeed can prepare their minds for its reception and enjoyment but the introduction of Christianity, and the diffusion of moral and religious education. We have no data by which we can compute the actual number of Christian slaves in the West Indies; but we know generally that, in almost all the larger islands, there are active and zealous missionaries, who devote themselves to the pious and benevolent task of imparting religious instruction to those neglected outcasts. In Antigua, especially, this greatest of blessings has been imparted to many thousands of slaves, who bear the yoke of bondage with patience, cheered by the hope which the Gospel reveals, as the end and compensation of all their sufferings. In many other islands, the prejudice of planters against the tuition of their slaves is silently wearing away; while the number of those, who, from various causes, are favorable to their instruction, is gradually increasing; and a conviction is gaining ground, most advantageous to the interests of all parties, of the inefficacy of human restraints and punishments to produce that uniform obedience, which is seen in well instructed and religious slaves. These are truly encouraging signs of the times; and when we add to them the increasing liberality of British Christians in this country, we may reasonably indulge the hope that the period is not far distant. when the entire black population in the West Indies shall hail with devout gratitude the day, that trans-

ported them from their native deserts, to make them free men in the noble sense suggested by the New Testament.

DOMINICA, the last of the Leeward or Caribbee islands, taking them from north-west to south-east; so named by Christopher Columbus, from his having discovered it on Sunday, Nov. 3d, 1493. It is situated about half way betwixt Guadaloupe on the north-west, and Martinico on the south-east, fifteen leagues from each, between 15° 20′ and 15° 44′ 30″ N. lat., and between 61° 17′ and 61° 30′ W. long. It is twenty-nine miles long from Crab-Point on the south, to the north-west cape of Agusha Bay on the north; and nearly sixteen broad from Raymond Bay east, to Coulihaut on the west. It contains 186,436 acres of land, and is divided into ten parishes, viz. St. John, St. Andrew, St. Peter, St. Joseph, St. Paul, St. David, St. George, St. Patrick, St. Luke, and St. Martin. It has many high and rugged mountains, interspersed with fertile valleys, and is watered by upwards of thirty rivers, besides a number of rivulets. Several of the mountains contain unextinguished volcanoes, which often discharge vast quantities of sulphur. Here are also several hot springs, esteemed efficacious in removing tropical disorders. Some of the waters are said to be hot enough to coagulate an egg. Vast swarms of bees produce a great quantity of wax and honey: they hive in the trees, and are thought to have been transported from Europe; the native bee of the West Indies being a smaller species, unprovided with a sting, and very different in its manners from the European. The forests afford an inexhaustible quantity of rose wood. The fruits and other productions are similar to those in the neighbouring islands; but the soil, being generally thin, is more adapted to the rearing of cotton than sugar. The best eye-stones that are known, are found on the shores of this island. They are shaped like a lentil, smooth and sleek, but much smaller, and of a gray color. The anchorage is good all round the coast of Dominica; but it has no port or bay for retiring into; but the vessels have the advantage of shelter behind many of its capes. Charlotte town (Roseau of the French), the chief place, is on a point of land between two bays on the south-west side of the island. It has 500 houses. Portsmouth, or Prince Rupert's Bay, on the north-west side of the island, is the only other town.

The imports from the island to England, and the exports from the latter were,

	Imports.	Exports.
In 1809 . .	£315,584 . .	£161,291
1810 . .	282,002 . .	39,686.

The principal imports were,

	Coffee. *cwts.*	Sugar. *cwts.*	Rum. *galls.*	Cotton. *lbs.*
In 1809	3,254	41,990	56,356	75,425.
1810	27,185	61,522	39,397	59,742.

This island was reduced in 1778 by the French, under the marquis de Bouille, governor of Martinico; who made a descent with 2000 men, and found only 100 regulars, and a few companies of militia, to oppose him. Resistance therefore being vain, the only thing the garrison could do, was to procure as favorable terms as possible. These were granted with such readiness as did great honor to the character of this officer; the inhabitants experiencing no kind of change except that of transferring their obedience from Britain to France. A large quantity of military stores, with 164 pieces of cannon, and twenty-four brass mortars, were found in the place; so that the French themselves expressed their surprise at finding so few hands to make use of them. It was restored to Britain at the conclusion of the peace in 1783; and, in 1795, the French attempted to take it again, but were unsuccessful; all the Frenchmen who landed being either killed or taken prisoners. The position of Dominica renders it of great consequence to England in war with France; for a squadron, stationed at Prince Rupert's Bay, may effectually cut off the communication between Martinique and Guadaloupe.

DOMINICA, or HEEVAROA, is the largest of the Marquesas islands, called by the natives Hiwaoa and Ohiwana, extending east and west eighteen miles. It is about forty-eight miles in circumference; full of rugged hills, and of a barren surface, but is, however, inhabited. Long. 139° 3′ W., lat. 9° 44′ N.

DOMI'NICAL, *adj.* Lat. *dominicalis*. Relating to the Lord's day, or Sunday.

> The cycle of the moon serves to shew the epacts, and that of the sun the *dominical* letter, throughout all their variations. *Holder on Time.*

DOMINICAL LETTER, or SUNDAY LETTER, See CHRONOLOGY. The dominical letters were introduced into the kalendar by the primitive Christians, instead of the nundinal letters in the Roman kalendar.

DOMINICANS, an order of religious, so named from their founder Dominic de Guzman, who preached with great zeal against the Albigenses in Languedoc, where he laid the first foundation of this order. See GUZMAN. It was approved of in 1215, by Innocent III., and confirmed in 1216, by a bull of Honorius III, under the title of St. Augustin; to which Dominic added several austere precepts and observances, obliging the brethren to take a vow of absolute poverty; to abandon entirely all their revenues and possessions; and to take the title of Preaching Friars, because the public instruction was the main end of their institution. The first convent was founded at Thoulouse by the bishop thereof and Simon de Montfort. Two years afterwards they had another at Paris, near the bishop's house; and some time after a third in the rue St. Jacques, whence the denomination of Jacobins. Just before his death, Dominic sent Gilbert de Fresney, with twelve of the brethren, into England, where they founded their first monastery at Oxford, in 1221, and soon after another at London. In 1276 the mayor and aldermen of the city of London gave them two whole streets by the river Thames, where they erected a very commodious convent, whence that place is still called Black Friars, from the name by which the Dominicans were called in England. Dominic, at first, only took

the habit of the regular canons; that is, a black cassock and rochet: but this he quitted in 1219, for that which they now wear, which it is pretended was shown by the blessed Virgin herself to the beatified Renaud of Orleans. This order has been spread throughout the whole known world. Before the revolutionary wars, it had forty-five provinces under the general, who resided at Rome; and twelve particular congregations, governed by vicars general. There have been three popes of this order, above sixty cardinals, several patriarchs, 150 archbishops, and about 800 bishops; besides masters of the sacred palace, whose office has been constantly discharged by a religious of this order, ever since St. Dominic, who held it under Honorius III. in 1218. Of all the monastic orders, none enjoyed a higher degree of power and authority than the Dominicans. Their credit was great, and their influence universal. But the measures they used to maintain and extend their authority were so perfidious and cruel, that their influence began to decline towards the beginning of the sixteenth century. The tragic story of Jetzer, conducted at Bern in 1509, for determining an uninteresting dispute between them and the Franciscans, relating to the immaculate conception, reflects indelible infamy on this order. See an account of it in Mosheim's Eccl. Hist. vol. iii. p. 294, 8vo. They were indeed perpetually employed in stigmatising with the opprobrious name of heresy numbers of learned and pious men; in encroaching upon the rights and properties of others, to augment their possessions; and in laying the most iniquitous snares and stratagems for the destruction of their adversaries. They were the principal counsellors, by whose instigation and advice Leo X. was determined to the public condemnation of Luther. The papal see never had more active and useful abettors than this order, and that of the Jesuits. The dogmata of the Dominicans are opposite to those of the Franciscans. There are nuns of this order, called in some places Preaching Sisters. These are even more ancient than the friars; St. Dominic having founded a society of religious maids at Proilles in 1206. There is also a third order of Dominicans, both for men and women.

DOMINIS (Mark Anthony de), archbishop of Spalatro in Dalmatia at the close of the fifteenth and beginning of the sixteenth centuries. Becoming acquainted with bishop Bedell, while chaplain to Sir Henry Wotton, ambassador from James I. at Venice, he became resolved to abandon the Roman Catholic religion, concerning the authority of which he had long had his doubts. He had written De Republicâ Ecclesiasticâ, but had hitherto dreaded to publish his work; he now therefore committed them to Bedell, and they were afterwards published at London, with his corrections. He came to England with Bedell; where he was received with great respect, and preached and wrote against the Romish religion. He had a principal share in publishing father Paul's History of the Council of Trent, which was inscribed to king James in 1619. But on the promotion of pope Gregory XIV., who had been his school-fellow and old acquaintance, he was deluded by Gondomar, the Spanish ambassador, into the hopes of procuring a cardinal's hat, by which he fancied he should prove an instrument of great reformation in the church. Accordingly he returned to Rome in 1622, recanted his errors, and was at first well received; but he afterwards wrote letters to England, repenting his recantation; which being intercepted, he was imprisoned by pope Urban VIII., and died in 1625. He was the author of the first philosophical explanation of the rainbow.

DOMINIUM DIRECTUM, in Scotch law, the right which a superior retains in his lands, notwithstanding the feudal grant to the vassal. See LAW.

DOMINIUM EMINENS, in Scotch law, that power which the state or sovereign has over private property, by which the proprietor may be compelled to sell it for an adequate price where public utility requires.

DOMINIUM UTILE, in Scotch law, the right which the vassal acquires in the lands by the feudal grant from his superior.

DOMINUS, a title anciently prefixed to a name, usually to denote the person either a knight or a clergyman. The title was sometimes also given to a gentleman not dubbed; especially if he were lord of a manor. In Holland, the title dominus distinguished a minister of the reformed church.

DOMUS, in antiquity, is sometimes used for all sorts of houses, either magnificent or ordinary; but it is often taken by writers to intimate a mansion of some lord, or palace of some prince, as in Virgil, speaking of the palace of Dido.

'At domus interior regali splendida luxu.'

These houses were built with much magnificence, and were of a vast extent; for they had many courts, apartments, wings, cabinets, bagnios, stoves, and halls, either to accommodate their owners at table, or for transacting matters of consequence. Before these houses was generally a large place or porch, where clients and persons giving attendance to great men waited to make their court. It is supposed that this was covered, for the conveniency of persons, who were sometimes waiting very long before they were admitted.

There was a second part to these houses, called cavum-œdium, or cavœdium: it was a spacious enclosed court.

The third part was called atrium interius, i. e. in general the whole inside of the house. Virgil used this word in this sense, when he said,

'Apparet domus intus, et atria longa patescunt;'

for it is plain that Virgil means by the word atria, that all may be seen in the inside of a house when the doors are opened. There was a porter waiting at the atrium, called servus atriensis. Within this there were many figures; for the Romans raised every where trophies and statues, to leave monuments of their great actions to posterity, not only in the provinces, which they subdued to the empire, but also in public places, and their own palaces at Rome.

Here were therefore painted or engraven battles, axes, bundles of rods, and the other badges of the offices that their ancestors or them-

selves had obtained: and statues of wax or metal, representing their fathers in basso relievo, were set up in niches of precious wood or rare marble. On the days of their solemn feasts, or triumphal pomp, these niches were opened, and the figures, crowned with festoons and garlands, carried about the town. When any of the family died, these statues accompanied the funeral parade; wherefore Pliny says, that the whole family was there present from the first to the last. There were also large galleries in these houses, adorned with pillars and other works of architecture.

The halls were built after the Corinthian or Egyptian order. The first had only a row of pillars set upon a pedestal, or on the pavement, and supported nothing but the architrave, and cornish of joiners' work or stud, over which was the ceiling in form of a vault; but the later halls had architraves upon pillars, and the architraves of the ceilings made of pieces joined together, which make an opened circular terrace. These houses had many apartments, some for men, and others for women; some for dining-rooms called triclinia, others for bed-chambers named dormitoria; and some others to lodge strangers. So large was ancient Rome, that there were 48,000 houses standing by themselves, or being so many insulæ, and having a light on every side.

The Greeks built in a different manner from the Romans; for they had no porch, but from the first door they entered into a narrow passage; on one side of it there were stables, and on the other was the porter's lodge; at the end of this passage there was another door, to enter into a gallery supported with pillars, and this gallery had piazzas on three sides.

Within the Greek houses there were halls, for the mistresses of the family, and their servant maids to spin in; in the entry both on the right and left hand there were chambers; one called thalamus, and the other antithalamus. Round the piazzas there were dining-rooms, chambers, and wardrobes. To this part of the house was joined another which was considerably larger. The finest entries and most magnificent doors were at this part of the house. There were sometimes four square halls, so large and spacious, that they would easily hold four tables, with three seats in form of beds, and leave room enough for the servants and gamesters. They entertained their friends in these halls, for it was not the custom for women to sit amongst men. On the right and the left of these buildings were small apartments, and convenient rooms to receive the guests; and among the Greeks wealthy and magnificent men kept apartments, with all their conveniencies, to receive any persons who came to lodge at their houses. The custom was, that after they had given them an entertainment the first day, they sent them afterwards every day some present, as chickens, eggs, pulse, and fruits; so that travellers were lodged as they had been at their own houses, and might live in these apartments privately.

The apartments were paved with mosaic or inlaid work. Pliny tells us, that the pavements that were painted and wrought with art came from the Greeks, who called them λιθοστρωτα. These were in fashion at Rome during the time of Sylla, who had one made at Præneste, in the temple of Fortune. This pavement was not only used for paving the courts of houses and the halls, but also in chambers, and wainscotting the walls, and called musæa, musia, and musiva, because ingenious works were ascribed to the muses, and the muses and sciences were thereby represented.

DON, *v. a.* [To do on.] To put on; to invest with; the contrary to doff. Obsolete.

> The purple morning left her crimson bed,
> And *donned* her robes of pure vermilion hue.
> *Fairfax.*
>
> Her helm the virgin *donned*. *Id.*
>
> What! should I *don* this robe, and trouble you?
> *Shakspeare.*

DON, *n. s.* } Lat. *dominus*. The Spanish
DON'SHIP, *n. s.* } title for a gentleman; as, Don Quixote. It is with us used ludicrously: donship is the rank of a don or gentleman.

> To the great *dons* of wit,
> Phœbus gives them full privilege alone
> To damn all others, and cry up their own.
> *Dryden.*
>
> I'm none of those,
> Your bosom-friends, as you suppose
> But Ralph himself, your trusty squire,
> Wh' has dragged your *donship* out o' the mire.
> *Hudibras.*
>
> Here *dons*, grandees, but chiefly dames abound,
> Skilled in the ogle of a roguish eye,
> Yet ever well inclined to heal the wound.
> *Byron.*

DON, a river of Russia, anciently called Tanais, which takes its rise from the small lake of St. John, near Tula, in the government of Moscow, and passing through part of the province of Voronetz, a small portion of the Ukraina Slobodskaia, and the whole province of Azof, divides itself near Tcherkask into three streams, and falls in these separate branches into the sea of Azof. The river has so many windings, is in many parts so shallow, and abounds with such numerous shoals, as to be scarcely navigable, excepting in the spring, upon the melting of the snows; and its mouth is also so choked up with sand, that only flat-bottomed vessels can pass into the sea of Azof, at any other season. The banks of the Don, and the rivulets which fall into it, are clothed with large tracts of forest, whose timber is floated down the stream to St. Demetri and Rostof, where the frigates for the sea of Azof are chiefly constructed. The navigation of the Don, Mr. Coxe observes, may possibly hereafter be rendered highly valuable, by conveying to the Black Sea the iron of Siberia, the Chinese goods, and the Persian merchandise: which latter commodities, as well as the products of India, formerly found their way into Europe through this same channel.

DON, a river of Scotland, in Aberdeenshire, which rises about four miles north of the castle of Brae-Mar, runs through the district of Alford; so named from the river being almost All ford, or every where fordable, in that part of its course; afterwards joins the Ury at Inverury, and falls into the British Ocean at New Aberdeen, within two miles of the mouth of the Dee. It has been long famous for its salmon fishery.

A space of within 500 yards of this river has in one year produced fish to the amount of £2000.

DONAGHADEE, a post, market, and port town in the barony of Ardes, and county of Down, twenty-seven miles and a half distant from Port Patrick in Scotland, the corresponding packet station. Lat. 54° 45′ N., long. 5° 40′ W. The ancient quay, in form of a crescent, was built by lord Montgomery, and accommodated from twelve to fourteen sail. The present pier was built at the expense of government, and is intended to enclose a surface of 100 fathoms square, accessible at low water for vessels of fifteen feet draft. The south pier is completed, but shelter is much wanted on the north. Port Patrick lies N. E. by E. ¼ N., or nearly north-east by compass from Donaghadee. It has been suggested that the execution of this harbour, according tc the original design, i. e. with a funnel-shaped mouth, might possibly cause vessels to steer wildly when entering in a heavy swell.

DONALDSON (John), a painter and engraver of some repute, was born at Edinburgh in 1737. He painted portraits in miniature, and was distinguished also for his skilful imitations of the old engravers, which he executed so correctly as to deceive even connoisseurs. He published a volume of poems, and an Essay on the Elements of Beauty. He also cultivated chemistry, and discovered a method of preserving meat and vegetables during long voyages. He died in 1801.

DONARIA, among the ancients, in its primary signification, was taken for the places where the oblations offered to the gods were kept; but afterwards was used to denote the offerings themselves; and sometimes, improperly, the temples.

DONATIA, in botany, a genus of the trigynia order and triandria class of plants: CAL. triphyllous perianth. with short subulated leaves standing at a distance from one another: COR. petals from eight to ten, of an oblong linear shape, twice as long as the calyx: STAM. three subulated filaments, the length of the calyx; the antheræ roundish, didymous, and two-lobed at the base. Species, one only, a native of Terra del Fuego.

DONATIO MORTIS CAUSA, in law, a disposition of property made by a person in his last sickness, who, apprehending his dissolution near, delivers or causes to be delivered to another the possession of any personal goods, to keep in case of his decease. If the donor dies, this gift needs not the consent of his executor; but it shall not prevail against creditors; and it is accompanied with this implied trust, that, if the donor lives, the property shall revert to himself, being only given in prospect of death, or mortis causâ. This method of donation seems to have been conveyed to us from the civil lawyers, who borrowed it from the Greeks.

DONA'TION, *n. s.* } Fr. *donation*; Span.
DON'ATIVE, *n. s.* } *donacion*; Ital. and Lat.
DO'NOR, *n. s.* } *donatio*. from *dono*, expletive of *do*, to give. A donation is a grant; the act of giving; and a gift: for donative see the following article. A donor is a giver or bestower.

The Roman emperor's custom was, at certain solemn times, to bestow on his soldiers a *donative*; which *donative* they received wearing garlands upon their heads. *Hooker.*

Howsoever the letter of that *donation* may be unregarded by men, yet the sense thereof is so imprinted in their hearts, as if every one laid claim for himself unto that which was conferred upon all. *Raleigh's Essays.*

He gave us only over beast, fish, fowl,
Dominion absolute; that right we hold
By his *donation*. *Milton's Paradise Lost.*

After *donation* there is an absolute change and alienation made of the property of the thing given: which being so alienated, a man has no more to do with it than with a thing bought with another's money. *South.*

Litters thick besiege the *donor's* gate,
And begging lords and teeming ladies wait
The promised dole. *Dryden's Juvenal.*

It is a mighty check to beneficent tempers to consider how often good designs are frustrated and perverted to purposes, which, could the *donors* themselves have foreseen, they would have been very loth to promote. *Atterbury.*

Never did steeple carry double truer;
His is the *donative*, and mine the cure. *Cleveland.*

DONATISTS, ancient schismatics in Africa, so denominated from their leader Donatus. They had their origin A. D. 311, when, in the room of Mensurius, who died in that year on his return to Rome, Cæcilian was elected bishop of Carthage, and consecrated without the concurrence of the Numidian bishops, by those of Africa alone; whom the people refused to acknowledge, and to whom they opposed Majorinus; who, accordingly, was ordained by Donatus bishop of Casæ Nigræ. They were repeatedly condemned, in different councils held at Rome and Arles: and particularly in one at Milan, in 316, before Constantine the Great, who deprived them of their churches, banished their bishops, and punished some of them with death. Their cause was espoused by another Donatus, called the Great, the principal bishop of that sect, who, with numbers of his followers, was exiled by Constans. Many of them were punished with great severity. See CIRCONCELLIONES. However, after the accession of Julian, in 362, they were restored to their former liberty. Gratian, in 377, deprived them of their churches, and prohibited their assemblies. But, notwithstanding these severities, they had a very considerable number of churches towards the close of the fourth century; till they began to decline, on account of a schism among themselves, occasioned by the election of two bishops, in the room of Parmenian, the successor of Donatus. One party elected Primian, and were called Primianists, and another Maximian, and were called Maximianists. Their decline was also precipitated by the zealous opposition of St. Augustine, and by the violent measures pursued against them by Honorius, at the solicitation of two councils held at Carthage; the one in 404, and the other in 411. Many of them were fined, their bishops were banished, and some put to death. This sect revived and multiplied under the protection of the Vandals, who invaded Africa in 427, and took possession of this province; but it sunk again under new severities, when their empire

was overturned in 534. Nevertheless, they remained in a separate body till the close of the sixth century, when Gregory, the Roman pontiff, used various methods for suppressing them; his zeal succeeded, and there are few traces to be found of the Donatists after this period. They were distinguished by other appellations; as Montenses, Campites, Rupites, &c. They held three councils, one at Cirta in Numidia, and two at Carthage. The peculiar opinions of the Donatists were, 1. That baptism conferred out of the church, that is, out of their sect, was null; and accordingly they rebaptised those who joined their party from other churches, and re-ordained their ministers. Donatus seems likewise to have given into the doctrine of the Arians, with whom he was closely allied; and, accordingly, St. Epiphanius, Theodoret, and some others, accused the Donatists of Arianism; and it is probable that the charge was well founded, because they were patronised by the Vandals, who were of these sentiments. But St. Augustine (Ep. 185, to count Boniface, and Hær. 69.) affirms, that the Donatists, in this point, were clear of the errors of their leader.

Donative, in the canon law, a benefice given by the patron merely without a presentation to the bishop. If chapels founded by laymen be not approved by the diocesan, and, as it is called, spiritualised, they are not accounted proper benefices, neither can they be conferred by the bishop, but remain to the pious disposition of the founders, and their heirs, who may give such chapels without the bishop. Gwin observes, that the king might anciently found a free chapel, and exempt it from the jurisdiction of the diocesan; so may he, by letters patent, give liberty to a common person to found such a chapel, and make it donative, not presentable; and the chaplain or beneficiary, is deprivable by the founder or his heir, and not by the bishop. Donatives are within the statute against simony; and, if they have cure of souls, within that against pluralities. If the patron of a donative does not nominate a clerk, there can be no lapse thereof, unless it be specially provided for in the foundation; but the bishop may compel him to do it by spiritual censures. But, if it be augmented by queen Anne's bounty, it will lapse like other presentative livings. 1 Geo. I. stat. 2, cap. 10. The ordinary cannot visit a donative, and therefore it is free from procuration, and the incumbent is exempted from attendance at visitations. All bishoprics anciently were donative by the king. Where a bishop has the gift of a benefice, it is properly called a donative, because he cannot present to himself.

Donative, Donativum, in antiquity, was properly a gift made to the soldiers, as congiarium was to the people. The Romans made large donatives to their soldiers. Julia Pia, wife of the emperor Severus, is called on certain medals mater castrorum, because of the care she took of the soldiery, by interposing for the augmentation of their donatives, &c. Salmasius, in his notes to Lampridius, on his Life of Heliogabalus, mentioning a donative that emperor gave of three pieces of gold per head, observes, that this was the common and legitimate rate of a donative. Casaubon, in his notes on the Life of Pertinax by Capitolinus, observes, that Pertinax made a promise of 2000 denarii to each soldier; which amounts to upwards of £97 sterling. The same author writes, that the legal donative was 20,000 denarii; and that it was not customary to give less, especially to the prætorian soldiers: that the centurions had double, and the tribunes, &c., more in proportion.

DONATUS (Ælius), a celebrated grammarian, who lived at Rome, about A. D. 354. He was one of St. Jerome's masters; and composed commentaries on Terence and Virgil, which are esteemed.

Donatus (Jerom), a learned and noble Venetian, who flourished in the end of the fifteenth century, and died in the beginning of the sixteenth. He was a benefactor to his country, both as a commander and as a negociator, and procured its reconcilement with pope Julius II. He wrote many books, which remain in MS.; besides a translation of Alexander Aphrodiceus de Anima, which he published. He died of a fever at Rome just as he had completed his negociation with Julius.

DONAVESCHINGEN, or Doneschingen, a town of Germany, in the circle of Suabia, situated in the Black Forest, where the prince of Furstenberg has a palace, near which is a spring, said to be the source of the Danube, thirteen miles N. N. W. of Schaffhausen, and thirteen west of Duttlingen.

DONAUWERTH, a strong and well built town of Bavaria, in the circle of the Upper Danube, on the left bank of that river. It has been taken and retaken several times in the wars of Germany; and was formerly an imperial city. It has a bridge over the Danube, four good churches and four hospitals: it lies thirty miles west of Ingoldstadt, and eighteen north of Augsburgh. In this neighbourhood were the famous lines of Schellenberg, when the allies under the duke of Marlborough obtained an important victory over the Bavarians on the 2d July 1704.

DONAX, a genus of insects belonging to the order of vermes testacei. It is an animal of the oyster kind; and the shell has two valves, with a very obtuse margin in the fore part. There are nineteen species, principally distinguished by the figure of their shells.

DONCASTER, an ancient, large, and populous town, in the West Riding of Yorkshire, seated on the Don, with a castle, whence its name. It is incorporated, and is governed by a mayor, recorder, six aldermen, and twenty-four councillors. In this town is a handsome theatre, town-hall, bank, free grammar-school, almshouse, work-house, a public dispensary, and various other benevolent societies and institutions for the relief of sick and afflicted persons. The parish church is an ancient structure; and its steeple is a piece of excellent workmanship. Here are numerous meeting-houses for religious sects of different denominations. Doncaster has long been celebrated for its races; on the course, which is one of the most eligible in the kingdom, is erected an elegant stand for the accommodation of the spectators and visitors, who are always numerous and fashionable. It has a

market on Monday; and carries on manufactures of vests, petticoats, stockings, gloves, &c. It has two bridges over the Don, with a high causeway beyond them, the river being apt to overflow its banks. It has also the relics of an old Roman road, and lies thirty-seven miles south of York, and 160 north by west of London.

DONE, a kind of interjection. The word by which a wager is concluded: when a wager is offered, he that accepts it says 'Done!'

Done: the wager? *Shakspeare. Tempest.*

One thing, sweet heart, I will ask:
Take me for a new-fashioned mask.
——*Done*: but my bargain shall be this,
I'll throw my mask off when I kiss. *Cleveland.*

'Twas *done* and *done*, and the fox, by consent, was to be the judge. *L'Estrange.*

DONEGAL, anciently Tyrconnel, is a county in the province of Ulster, bounded on the north and west by the Atlantic Ocean, by parts of Leitrim and Fermanagh on the south, and by Tyrone, Londonderry, and Fermanagh on the east. It is divided into six baronies, and forty-two parishes. Its superficies measures about 679,550 plantation acres. The line of coast is adorned by many islands, of which seventeen are inhabited; and it is also indented by numerous excellent harbours and bays, capable of being made available either for the West-India trade, or the encouragement and growth of valuable fisheries. The chief islands are Aranmore, containing 2000 acres, 132 houses, and 778 inhabitants: Inisbofin, having forty-three houses and 252 inhabitants: Tory Island, supporting a population of 296 in fifty-nine houses. The most important harbours are, the noble inlet of Lough Swilly, extending thirty miles in length; Mulroy and Sheep-haven in the north; Teelin, Killybegs, and Brucklis in the south. The whale fishery was once successfully prosecuted on this coast, and a pier was erected at Inver, as an auxiliary, which now, unhappily, is a total ruin. Inver and Brucklis Bay continue to be the chief seat of the herring fishery; but from the want of shelter for boats, this mode of life is rendered in this place awfully perilous. In 1813 fifty fishermen were lost in the last-mentioned bay, entirely owing to the want of any rendezvous, when the squall came on. The safest, best, and largest harbour on this line, is Killybegs: here several hundred sail might anchor safely, but could not put to sea hence in west or south-west winds. The fishery along this coast has latterly decayed, and is not likely to be arrested in its melancholy decline, without either the countenance and assistance of government, or of the landed proprietors of the county.

The roads in Donegal are, in most places, unfit for carriages; and the traffic of the country is carried on generally by horses, with sacks and baskets. No mail-coach, as yet, passes through any part of this great district. The coast road should be all remade: a new line is wanted from the Rosses, by the Giddore River, to Gortahork; and also from the same place to Fintown, by Aragib Mountain. In fact, without coast improvements, the population will find it difficult to procure subsistence; and with the required road improvements, a market would be found for the overplus of food obtained by the improved harbours, at the same time that civilisation would advance much more rapidly. Donegal abounds in valuable mineral substances; it has been visited by Dr. Berger, Dr. Stokes, and Sir Charles Giesecke. The surface may be termed both boggy and mountainous; the former part useless, from a scanty population and want of drainage; the latter unapproachable from want of roads. There is a valuable lead mine, at full work, near Kildrum. At Muckish there exists a rich bed of silicious sand. Iron ore is found in Aran-more, Muckish, and other places. Coals are found at Dromore, Ards, and Glanelly, and slate near Ballyshannon and Letterkenney. Veins of primitive limestone and marble, fit for statuary, appear at Fintown; sienite, and porphyritic sienite, are had here in great abundance, besides several species of limestone. Dykes are of frequent occurrence, and consist principally of trap and greenstone. There is but little trade of any description existing here. Linen is made by the cottagers, and sold to the travellers from Derry, Sligo, and Strabane. Kelp is made along the coast; and the fisheries, now in a very low state, might be rendered a great blessing to the poor and peaceable inhabitants of this large county, by the adoption of a few of Mr. Nimmo's very beautiful designs for coast improvements.

There are some remarkable natural beauties and curiosities in Donegal: the pass of Bamsmore is the most sublime of the first description; and M'Swine's Gun the most singular of the second. The climate, from its latitude and exposure to the Atlantic, is both colder and more damp than most of the other northern counties; yet longevity is said to be one of its attributes: the last census returns upwards of twenty persons in the county as having attained the age of 100, and several as having reached the unusually extended age of 115 years. The chief towns are Lifford, Letterkenney, Raphoe, Ballyshannon, Rathmelton, Killybegs, Buncrana, Ballintra, Dunfanaghy, &c. The chief, or county town is Lifford, situated on the river Finn. The assizes for the county are held here, but from its awkward situation, upon the boundaries of the county, and its proximity to Strabane, it has never risen to the importance to which shire-towns are entitled; the population scarcely amounts to 1000 persons. Letterkenny is well situated for supplying the county with imports, but Rathmelton much better. The town of Ballyshannon, the property of Packenham Conolly, Esq., is situated at the embouchure of the river Erne. Here is the famous salmon fishery, the produce of which is all exported to London, carefully packed in ice. The fall of Ballyshannon is a beautiful object, and always supplied with a great body of water from Lough Erne. The harbour of Ballyshannon is obstructed by two bars; but, when they are passed, there is safe lying for small vessels in the pool below the waterfall. This harbour is much in want of improvement, and a navigation from Loch Erne to the sea is an obvious want. The Erne, the Finn, and the Guybarra, are the principal rivers in the county; but

lakes and mountain pools are very numerous. Lough Derg is rendered famous in story by the pilgrimages to St. Patrick's Purgatory, on one of its islands, annually performed by multitudes from every part of Ireland; and Lough Esk is noted for the production of excellent char fish. There are few counties in Ireland possessing greater interest, and at the same time less known to the public, than Donegal.

DONEGAL TOWN, in the barony of Tyrhugh, county of Donegal, and province of Ulster, is about 140 miles from Dublin. It is a post, market, and fair town. Here is a beautiful remnant of the military antiquities of Ireland, O'Donnel's castle, erected in the twelfth century, and at this day singularly perfect. The ruins of a monastery, founded in 1474, by Owen Rowe, stand at the distance of half a mile from the town.

DONERAIL, a borough of Ireland, in Cork, seated on the Awbeg, near some quarries of beautiful variegated marble. It sent two members to parliament before the Union. It is nineteen miles north-east of Cork, and 115 south-west of Dublin.

DONGALA, DANGALA, or DANKALA, as it is called by the Arabs, is a town of Africa, in Nubia, seated on the east bank of the Nile. The streets are said to be half-deserted, being filled up with sand brought down by the waters from the mountains. The castle is large but not strong; but an account of it by Porcet, dated at the close of the seventeenth century, is the last we have seen. Persons of rank here go bareheaded, their hair being disposed in tresses, and their whole attire consisting in a rude vest without sleeves. The pride of Dongala is in its horses, which are as beautiful as their riders are skilful. Since the expulsion of the Mamelukes from Egypt, those of that body which effected their escape, have taken possession of Dongala, and established a species of petty kingdom there. Their number, however, does not exceed 500, with 3000 or 4000 slaves. Dongala is 150 miles north of Sennar, and 690 south of Cairo.

DO'NJON, *n. s.* Now corrupted to *dungeon*, from low Lat. *domnionum*, according to Menage. The highest and strongest tower of the castle, where prisoners were kept: as in Chaucer. It is now used of subterraneous prisons.

> The grete toure, that was so thicke and strong,
> Which of the castle was the chief *dongeon*,
> Wherein the knightes were in prison,
> Was evin joynant to the garden-wall,
> Ther as this Emely had her pluyeing. *Chaucer.*

DONNE (John), D. D., a poet and divine of the seventeenth century. His parents were of the Romish religion, and used their utmost efforts to keep him firm to it; but his early examination of the controversy between the church of Rome and the Protestants, at last determined him to choose the latter. He travelled into Italy and Spain, where he learnt their languages to perfection. Soon after he returned to England Sir Thomas Egerton, keeper of the great seal, appointed him his secretary; in which post he continued five years. Marrying privately Anne, the daughter of Sir George Moore, then chancellor of the garter, he was dismissed from his place, and thrown into prison: but he was afterwards reconciled to Sir George by the good offices of Sir Francis Wolley. In 1612 he accompanied Sir Robert Drury to Paris, and during this time many of the nobility solicited the king for some secular employment for him. But king James, who took plsasure in his conversation, had engaged him in writing his Pseudo-Martyr, printed at London in 1610; and was so highly pleased with that work, that in 1614 he prevailed upon him to enter into holy orders; appointed him one of his chaplains, and procured him the degree of D. D. from the University of Oxford. In 1619 he attended the earl of Doncaster in his embassy into Germany. In 1621 he was made dean of St. Paul's, and vicar of St. Dunstan's, in London; the advowson of it having been given to him long before by Richard earl of Dorset. By these and other preferments, he was enabled to be charitable to the poor, and to make good provision for his children. He wrote besides the above, 1. Devotions upon emergent occasions. 2. The Ancient History of the Septuagint, translated from the Greek of Aristeus, in 4to. 3. Three volumes of sermons, folio. 4. A considerable number of poems, and other works. He died in 1631; and was interred in St. Paul's cathedral, where a monument was erected to his memory. His writings show him to have been a man of wit and learning; but his chief talent lay in satire; though it savors more of the coarse style of Juvenal, than of the elegant humor of Horace.

DONNE (Benjamin), a celebrated mathematician, was born in 1729, at Bideford, in Devonshire, where his father and brother Abraham were eminent teachers of the mathematics. Benjamin succeeded his father, but afterwards removed to Bristol, where he died in 1798. He was master of mechanics to his late majesty, and published—1. Mathematical Essays, 8vo., 1759. 2. A Map of Devonshire, from an actual survey, made by himself. 3. The Accountant and Geometrician, 8vo. 4. The British Mariner's Assistant, 8vo. 5. Essays on Trigonometry, 8vo. 6. An Epitome of Natural Philosophy, 12mo. 7. A Treatise on Mechanical Geometry, 12mo.

DONNINGTON, or DUNNINGTON, a town of England, in the county of Lincoln, with a good trade in hemp and hemp-seed, and a port for barges, by which goods are conveyed to Boston and the Washes. It has lately been much improved. Through the fens, a firm rampart of earth of considerable breadth has been constructed, which forms a convenient road to Sempringham. The church is a convenient building: in the lower part of the steeple is a stone, on which are the remains of a Roman inscription, unintelligible, with the exception of the date of the year. It has a weekly market on Saturday; and is eleven miles W. S. W. of Boston, and 110 north of London.

DOOD'LE, *n. s.* A cant word, says Johnson, perhaps corrupted from do little: *faineant*. A trifler; an idler.

DOOM, *v. a.* & *n. s.*, DOOM'S-DAY, DOOMS'MAN, DOOMS'-DAY-BOOK. Sax. dome, deman; Teut. *thum*, to DEEM, which see. To judge; destine; hence to com-

mand judicially, denounce; and the sentence, determination, or judgment given. Doomsday is the day of future and universal judgment. For doom's-day-book, see DOMESDAY-BOOK

Be thou consenting to thin adversarie soone, while thou art in the waye with him, lest peraventure thin adversarie take thee to the *domesman* and the *domesman* take thee to the ministre, and thou be sent in to prisoun. *Wiclif. Matt.* v.

He that etith and drynkith unworthile, etith and drynkith *doom* to him, not wiseli demynge the bodi of the lord. *Id.* 1 *Cor.* xi.

Have I a tongue to *doom* my brother's death,
And shall that tongue give pardon to a slave?
Shakspeare.

Revoke thy *doom*,
Or whilst I can vent clamour from my throat,
I'll tell thee thou dost evil. *Id. King Lear.*

Search Windsor Castle, elves, within and out:
Strew good luck, ouphes, on every sacred room,
That it may stand till the perpetual *doom*. *Id.*

Men, wives, and children stare, cry out, and run,
As it were *doomsday*. *Id. Julius Cæsar.*

The Danes also brought in a reckoning of money by ores, per oras, which is mentioned in *doomsday-book*. *Camden.*

His business gives him not leave to think of his conscience, and when the time, or term of his life is going out, for *dooms-day* he is secure; for he hopes he has a trick to reverse judgment. *Bp. Earle.*

They may serve for any theme, and never be out of date until *doomsday*. *Browne's Vulgar Errours.*

Him through malice fallen,
Father of mercy and grace! thou didst not *doom*
So strictly, but much more to pity incline. *Milton.*

Minos, the strict inquisitor, appears,
And lives and crimes, with his assessors, hears;
Round in his urn the blended balls he rowls,
Absolves the just, and *dooms* the guilty souls.
Dryden's Æneid.

Our souls, not yet prepared for upper light,
Till *doomsday* wander in the shades of night:
This only holiday of all the year,
We privileged in sunshine may appear. *Id.*

In the great day, wherein the secrets of all hearts shall be laid open, no one shall be made to answer what he knows nothing of: but shall receive his *doom*, his conscience accusing or excusing him. *Locke.*

I have no will but what your eyes ordain;
Destined to love, as they are *doomed* to reign.
Granville.

From the same foes, at last, both felt their *doom*;
And the same age saw learning fall, and Rome.
Pope.

Indeed, as there is a difference in constitutions, some rest well after these meals; it costs them only a frightful dream and an apoplexy, after which they sleep till *doomsday*. Nothing is more common in the newspapers, than instances of people, who, after eating a hearty supper, are found dead a-bed in the morning. *Franklin.*

In groundless hope, and causeless fear,
Unhappy man! behold thy *doom*;
Still changing with the changeful year,
The slave of sunshine and of gloom.
Johnson. Winter's Walk.

When to the supper-hall we moved along,
Why was I *doomed* to face her in the throng!
With what provoking kindness did she stand,
And loose her arm from his to press my hand,
And beg with well feigned sympathy to know
Of head-aches which I felt three months ago.
Dr. T. Brown.

The very knowledge that he lived in vain,
That all was over on this side the tomb,
Had made Despair a smilingness assume,
Which, though 'twere wild,—as on the plundered wreck
When mariners would madly meet their *doom*
With draughts intemperate on the sinking deck,—
Did yet inspire a cheer, which he forbore to check.
Byron.

DOON, or LOCH DOON, anciently called Dohn, a lake of Scotland, six miles long, in the south-east part of the district of Kyle, in Ayrshire. There is an island in it, with an old fort called Balloch Castle. Also the name of a river of Scotland, which issues from Loch Doon, and, running north-west, divides the district of Kyle from that of Carrick. After a course of various meanderings for twenty-four miles, it falls into the Frith of Clyde, a little south of Ayr. It abounds with salmon, trout, pikes, and eels.

DOOR, *n. s.* } Goth. *dore*; Sax. dora;
DOOR'CASE, } Teut. *thur*; Dan. *doer*; per-
DOOR'KEEPER. } haps from Gr. θυρα ἀ θύω, to enter; Minsheu. The gate of a house or room; hence entrance of any kind; passage; and by metonymy, a house. To lay at the doors of any one is to impute; to charge upon him any thing.

Petir stoode at the *dore* withoutforth: therfore the tothir disciple that was knowun to the bisschop wente out and seide to the womman that kepte the *dore* and broughte yn petir, and the damysel kepere of the *dore* seide to petir wher thou art also of this mannys disciplis. *Wiclif. Jon.* xviii.

The praier stint of Arcite the strong,
The ringes on the temple *dore* they rong,
And eke the *dores* clatten full fast,
Of which Arcite somewhat him agast.
Chaucer.

All the castle quaked from the ground,
And every *door* of free-will open flew.
Faerie Queene.

Since my own *doors* refuse to entertain me,
I'll knock elsewhere. *Shakspeare.*

The indispensable necessity of sincere obedience, shuts the *door* against all temptations to carnal security. *Hammond.*

He that hath given the following assistances to thee, desires to be even a *doorkeeper* in God's house, and to be a servant to the meanest of God's servants. *Taylor's Preface.*

In the side a *door*
Contrived; and of provisions laid in large,
For man and beast. *Milton's Paradise Lost.*

A seditious word leads to a broil, and a riot unpunished is but next *door* to a tumult. *L'Estrange.*

Lay one piece of flesh or fish in the open air, and another of the same kind and bigness within *doors*. *Bacon's Natural History.*

For without rules, there can be no art, any more than there can be a house without a *door* to conduct you in. *Dryden.*

In any of which parts if I have failed, the fault lies wholly at my *door*. *Id. Dufresnoy, Preface.*

Should he, who was thy lord, command thee now,
With a harsh voice and supercilious brow,
To servile duties, thou would'st fear no more;
The gallows and the whip are out of *door*.
Dryden. Persius.

His imaginary title of fatherhood is out of *doors*, and Cain is no prince over his brother. *Locke.*

Lambs, though they are bred within *doors*, and never saw the actions of their own species, push at those who approach them with their foreheads.
Addison's Spectator.

The making of frames for *doorcases*, is the framing of two pieces of wood athwart two other pieces.
Moxon.

Martin's office is now the second *door* in the street, where he will see Parnel. *Arbuthnot.*

A shrewd observer once said, that in walking the streets on a slippery morning, one might see where the good-natured people lived, by the ashes thrown on the ice before the *doors*. *Franklin.*

Love ends with hope; the sinking statesman's *door*,
Pours in the morning worshipper no more.
Johnson. Vanity of Human Wishes.

DOOSHACK, or Jullalabad, the capital of the province of Seistan, Persia, is situated in an open country, at the distance of eight or nine miles from the river Helmund, or Hetermund. It consists of about 2000 houses. Here is a good bazaar, and around are the ruins of a more extensive ancient city, which appears to have been built of half-burnt brick. The modern town, more commonly called Julallabad, is governed by a prince of an ancient and independent family, who styles himself king of Seistan.

DO'QUET, *n. s.* A paper containing a warrant. See Dock.

Before the institution of this office, no *doquet* for licence to alien, nor warrant for pardon of alienation made, could be purchased without an oath.
Bacon's Office of Alienation.

DORAK, or Felahi, a town of the province of Kuzistan, Persia, situated on two branches of the river Jerahi. It is surrounded by mud walls, two miles in circuit, sixteen feet thick, and flanked at intervals, by round towers. The palace of the seik occupies a large area, but is a mean edifice, and in a decaying state. Dorak is celebrated for the manufacture of Arabian cloaks. There are few houses within the walls, as most of the inhabitants prefer residing under the shade of the date trees, in the suburbs. Population 8000. Seventy-five miles south of Shuster.

DORAN, a town of Arabia, in Yemen, the residence of the chief or governor of the district Bellad Aries. It is situated on the declivity of a mountain, and was once surrounded by a wall with three gates. Twenty-eight miles south of Sana.

DORCAS. See Capra.

DORCHESTER, an ancient, neat, and well built town of England, the capital of Dorsetshire. It is seated on the river Frome, on a Roman road, and adorned with a fine terrace walk, planted with trees. It has three parish churches, with a court house where the county assizes are held; and is governed by a mayor, twelve aldermen, a recorder, and twenty four council-men. It has long been famous for its excellent ale. The streets are broad and well paved. It has two markets on Wednesday and Saturday, and sends two members to parliament. The manufactures are serge and broad cloth. It lies eight miles north of Weymouth, fifty-three east of Exeter, and 120 west by south of London.

Dorchester, a town in Oxfordshire, seated on the Tame, over which it has a bridge, three quarters of a mile above its junction with the Thames. It had five churches before the Norman conquest. It is ten miles south-east of Oxford, and forty-nine W. N. W. of London.

Dorchester, a county of Maryland, in North America. It is thirty-three miles long from east to west, and twenty-seven broad. Its produce is chiefly wheat, corn, and lumber. Cambridge is the chief town.

Dorchester, a town of the United States of America, in Grafton county, New Hampshire, seventeen miles north-east of Dartmouth.

Dorchester, a township of the United States, in Norfolk county, Massachusetts. It is two miles south by east of Boston, and is about six miles long, and three and a half broad. The chief manufactures are paper, chocolate, snuff, leather, and shoes.

Dorchester, a town of the United States, in Cumberland county, New Jersey, seventeen miles east of Fairfield.

Dorchester Neck, a peninsula of Massachusetts, on the coast of the township, in Norfolk county; the north-east point of which approaches within half a mile of Castle Island, and its north-west point within half a mile of the south part of Boston. During the American war forts were erected on the heights, and the township suffered greatly.

DORDOGNE, a department of France, comprehending part of the ci-devant province of Perigord, bounded on the north-east by that of the Upper Vienne, on the east by those of the Lot and Correze, on the south by that of the Lot and Garonne, on the west by those of the Gironde and the Lower Charente, and on the north-west by that of the Charente. Perigueux is the capital. Its superficial extent is about 3600 square miles, and the population 425,000, of whom 8500 are Protestants. It was at first divided into nine districts, but now consists of the five arrondissements of Perigueux (the capital), Bergerac, Sarlat, Riberac, and Nontron. The south of the department, particularly the banks of the Dordogne, the Vezere, and the Ile, is fruitful; but the north is mountainous, and covered with wood; the deficiency of corn being supplied by chestnuts and potatoes. There are a few manufacturing establishments in various places, viz. for hardware, paper, glass, and pottery. Wine, oil, and cattle, form the chief articles of export. Of wine 150,000 hogsheads are accounted an average vintage; the cattle and sheep are numerous.

Dordogne, a considerable river of France, which rises about seven miles north-west of Besse, in the department of the Puy-de-Dome. After forming the limit of the departments of the Puy-de-Dome and the Correze, it runs through an extensive tract, and falls into the Garonne, at

Bourg, about fifteen miles below Bourdeaux. Here the united stream takes the name of the Gironde. The course of the Dordogne is above 200 miles, during which it receives a great number of smaller rivers, the principal of which are the Vezere and Ile. The tide flows as high up as Castillon, about twenty-five miles from the confluence with the Garonne.

DORIA (Andrew), a celebrated patriot of Genoa, born in 1466. He entered into the service of Francis I. of France; but preserved that spirit of independence so natural to a sailor and a republican. When the French attempted to render Savona, long the object of jealousy to Genoa, its rival in trade, Doria remonstrated against the measure in a high tone; which, being represented by the malice of his courtiers in the most odious light, irritated Francis to that degree, that he ordered his admiral, Barbesieux, to sail to Genoa, then in the hands of the French troops, to arrest Doria, and to seize his galleys. This rash order being communicated to Doria, he retired with all his galleys to a place of safety; and, while his resentment was thus raised, closed with the offers of the emperor Charles V.; returned his commission, with the collar of St. Michael, to Francis, and hoisted the Imperial colors. To deliver his country, weary alike of the French and Imperial yoke, from the dominion of foreigners, was now Doria's highest ambition; and the favorable moment soon offered. Genoa was afflicted with the pestilence, the French garrison was greatly reduced, and ill paid, and the inhabitants were disposed to second his views. He sailed to the harbour with thirteen galleys, landed fifty men, and made himself master of the gates and the palace, with very little resistance. The French governor, with his feeble garrison, retired to the citadel, but was quickly forced to capitulate; when the people ran together, and levelled the citadel with the ground. It was now in Doria's power to have rendered himself the sovereign of his country; but, with a magnanimity of which there are few examples, he assembled the people in the court before the palace, disclaimed all pre-eminence, and recommended to them to settle the form of government they chose to establish. The people, animated by his spirit, forgot their factions, and fixed that form of government which subsisted till the revolution in 1797, with little variation. This event happened in 1528. Doria lived to a great age, respected and beloved as a private citizen, and is still celebrated among his countrymen by the most honorable of all appellations, 'The father of his country, and the restorer of its liberty.'

DO'RIC, *adj.* Lat. *dorus;* Fr. *dorique.* The ancient Dorians.

> Love warms our fancy with enlivening fires,
> Refines our genius, and our verse inspires;
> From him Theocritus, on Enna's plains,
> Learnt the wild sweetness of his *Doric* strains.
> *Littleton.*

DORIC DIALECT, one of the five dialects which prevailed among the Greeks. It was first used by the Lacedemonians, and particularly those of Argos; thence it passed into Epirus, Libya, Sicily, and the islands of Rhodes and Crete. In this dialect, Archimedes and Theocritus wrote, who were both Syracusans, as well as Pindar. The Doric dialect is properly the manner of speaking peculiar to the Dorians, after their recess near Parnassus and Asopus; and which afterwards came to obtain among the Lacedemonians, &c. Some even distinguished between the Lacedemonian and Doric; but, in reality, they were the same; setting aside a few particulars in the language of the Lacedemonians; as shown by Rulandus, in his treatise De Lingua Græca ejusque Dialectis, lib. v. To these authors we might add Archytas of Tarentum, Bion, Callinus, Simonides, Bacchylides, Cypselas, Alcman, and Sophron, as writers in the Doric dialect. Most of the medals of the cities of Græcia Magna, and Sicily, use the Doric dialect in their inscriptions, e. g. ΑΜΒΡΑΚΙΩΤΑΝ, ΑΠΟΛΛΩΝΙΑΤΑΝ, ΑΧΕΡΟΝΤΑΝ, ΑΧΥΡΙΤΑΝ, ΗΡΑΧ, ΑΕΩΤΑΝ, ΤΡΑΧΙΝΙΩΝ, ΟΕΡΜΙΤΑΝ, ΚΑΥΛΟΝΙΑΤΑΝ, ΚΟΠΙΑΤΑΝ, ΤΑΥΡΟΜΕΝΙΤΑΝ, &c.. Which shows the countries wherein the Doric dialect was used. The general rules of this dialect are thus given by the Port-royalists:

> D'ε Ητα, d'ω grand, d'ε, d'ο, & d' α l'a fait le Dore.
> D'ει fait ητα; d'ου, ω; & d'ω αυ fait encore.
> Oste ι de l' infini: & pour le singulier
> Se sert au feminin du nombre plurier.

But they are much better explained in the fourth book of Rulandus; where he even notes the minuter differences of the dialects of Sicily, Crete, Tarentum, Rhodes, Lacedæmon, Laconia, Macedonia, and Thessaly.

DORIC MODE, in music, the first of the authentic modes of the ancients. Its character is to be severe, tempered with gravity and joy; and is proper upon religious occasions, as also to be used in war. It begins D, *la, sol, re.* Plato admires the music of the Doric mode, and judges it proper to preserve good manners as being masculine; and on this account allows it in his commonwealth. The ancients had likewise their subdoric or hypodoric mode, which was one of the plagal modes. Its character was to be very grave and solemn: it began with *re,* a fourth lower than the Doric.

DORIC ORDER, the second of the five orders of architecture. It is usually placed upon the Attic base, though originally it had none. See ARCHITECTURE. The most considerable ancient monuments of this order, are the theatre of Marcellus at Rome, wherein the capital, the height of the frize, and its projecture, are much smaller than in the modern architecture; and the Parthenon, or temple of Minerva, at Athens, in which the short and massy columns bear upon the pavement without a base; and the capital is a simple torus, with its cincture, and a square, plain, and solid abacus.

DORIS, in ancient geography, a country of Greece, between Phocis, Thessaly, and Acarnania. It received its name from Dorus, the son of Deucalion, who made a settlement there. It was called Tetrapolis, from its four cities, viz. Pindus or Dryopis, Erincum, Cytinium, and Borium. To these four some add Lilæum and Carphia, and therefore call it Hexapolis. The

name of Doris has been common to many parts of Greece. The Dorians in the age of Deucalion inhabited Phthiotis, which they exchanged for Histiæotis, in the age of Dorus. From thence they were driven by the Cadmeans, and came to settle near the town of Pindus. Thence they passed into Dryopis, and afterwards into Peloponnesus. Hercules having re-established Ægimius king of Phthiotis or Doris, who had been driven from his country by the Lapithæ, the grateful king appointed Hyllus, the son of his patron, to be his successor, and the Heraclidæ marched from that part of the country to recover Peloponnesus. The Dorians sent many colonies into different places, which bore the same name as their native country. The most famous of these is in Asia Minor, of which Halicarnassus was once the capital. This part of Asia Minor was called Hexapolis, and afterwards Pentapolis.

Doris, in entomology, a genus of insects, belonging to the order of vermes testacea. The body is oblong, flat beneath; creeping: mouth placed below: vent behind, surrounded with a fringe: two feelers, retractile. There are several species: particularly D. argo, the lemon doris, has an oval body, convex, marked with numerous punctures, of a lemon color; the vent beset with elegant ramifications. It inhabits different parts of our seas, and is called about Brighton the sea lemon.

Doris, in mythology, the daughter of Oceanus and Tethys, wife of Nereus and mother of the Nereides.

DORKING, a market town of Surry, situated in the midst of beautiful hills. The church is collegiate, and has a square tower, near the centre, with eight bells, and a set of chimes. Besides a convenient workhouse, here are some commodious alms-houses, on a pleasant heath, called Cotman Dean. A great traffic is carried on in meal and lime; and this town is noted for its breed of poultry, which is singular from their having five fingers in each claw. Capons bred here, often weigh seven or eight pounds each, out of their feathers. In the neighbourhood are several corn-mills, and in the suburbs are many elegant seats. The custom of Borough-English prevails in this manor, by which the youngest son is heir to a copyhold estate. This practice is supposed to be derived from the ancient custom of the lord of the manor having a right to claim a lodging with every bride on her wedding night. Market on Thursday. Eight miles south from Epsom, and twenty-three S. S. W. from London.

DOR'MANT, *adj.*
DOR'MITIVE, *n. s.*
DOR'MITORY, *n. s.*
DOR'TOUR,
DOR'TURE.

Fr. *dormant*, from Lat. *dormio*, to sleep. Sleeping; hence private; concealed. Dortour and dormitory, a place to sleep in; and hence a burial place. Dormitive, a soporific.

His deth saw I by revelatioun,
Sayde this frere, at home in our *dortour*.
Chaucer. Cant. Tales.

There were other *dormant* musters of soldiers throughout all parts of the realm, that were put in readiness, but not drawn together.
Bacon's War with Spain.

He led us to a gallery like a *dorture*, where he shewed us along the one side seventeen cells, very neat. *Bacon.*

Prayer is the only *dormitive* I take to bedward, and I need no other laudanum than this to make me sleep; after which I close mine eyes in security, content to take my leave of the sun, and sleep unto the resurrection. *Sir T. Browne.*

He a dragon! if he be, 'tis a very peaceful one: I can insure his anger is *dormant*; or, should he seem to rouse, 'tis well lashing him, and he will sleep like a top. *Congreve's Old Bachelor.*

With this radius he is said to strike and kill his prey, for which he lies, as it were, *dormant*, till it swims within his reach. *Grew's Museum.*

Query,—Whether churches are not *dormitories* of the living, as well as of the dead. *Swift.*

It would be prudent to reserve these privileges *dormant*, never to be produced but upon great occasions. *Id.*

The places where dead bodies are buried, are in Latin called cæmiteria, and in English *dormitories*.
Ayliffe's Parergon.

Old *dormant* windows must confess
Her beams; their glimmering spectacles,
Struck with the splendor of her face,
Do the office of a burning-glass. *Cleaveland.*

Naked mourns the *dormitory* wall,
And Jones and Boyle's united labours fall.
Pope's Dunciad.

Rooms that have thorough lights are left for entertainment, and those that have windows on one side for *dormitories*. *Mortimer.*

Many vegetables during the night do not seem to respire, but to sleep like the *dormant* animals and insects in winter. *Darwin.*

Dormant, in heraldry, is used for the posture of a lion, or any other beast, lying along in a sleeping attitude with the head on the fore paws; by which it is distinguished from the couchant, where though the beast is lying, yet he holds up his head; as gules, a lion dormant, name Aylesworth.

DOR'MOUSE, *n. s.* *Dormio* to sleep, and mouse. A small animal which passes a large part of the winter in sleep.

Come, we all sleep, and are mere *dormice* flies,
A little less than dead: more dullness hangs
On us than on the moon. *Ben Jonson's Catiline.*

After they have lain a little while, they grow as drowsy as *dormice*, unless they are roused.
Collier on Thought.

DORN, *n. s.* From German, *dorn*, a thorn. The name of a fish; perhaps the same as the thornback.

The coast is stored both with shell-fish, as scallops and sheathfish; and flat, as turbots, *dorns*, and holybut. *Carew.*

DORNHAN, or Dornem, a town of Wirtemberg, in the Black Forest, in Suabia, and containing about 1050 inhabitants. It was burned down by lightning in 1718, but was soon after rebuilt. In the neighbourhood are the ruins of three castles. It is forty miles south-west of Stuttgard.

DO'RNICK, *n. s.* Of *Deornick* in Flanders, where first made. A species of linen cloth used in Scotland for the table.

DORNOCH, the county town of Sutherland, in a parish of the same name, on the Frith of Dornoch. It has five fairs; was made a royal borough in 1628; has a provost, four bailies, dean of guild, and treasurer; and joins with Tain, Dingwall, Wick, and Kirkwall, in electing a representative in parliament.

DOROBAT, a town of Arabia, in the capital of a district in the country of Yemen, situated on the crest of a mountain. Here is a remarkable prison excavated from the rock, wherein malefactors are secured by chains of considerable length. It is twelve miles west of Taas.

DOROGOBUSH, a town of European Russia, in the government of Smolensko, on the Dnieper. It is a place of great trade, and was burnt by the French, in 1812, in their retreat from Moscow. Forty-six miles E. N. E. of Smolensko.

DORONICUM, leopard's bane: a genus of the polygamia superflua order, and syngenesia class of plants; natural order forty-ninth, compositæ. Receptacle naked, the pappus simple; scales of the calyx in a double row, longer than the disc. The seeds of the radius naked without any pappus. There are six species; of which the

DORONICUM PARDALIANCHES, with obtuse heart-shaped leaves, is worthy of notice. It grows naturally in Hungary, and on the Helvetian mountains; but is frequently preserved in the English gardens. It has thick fleshy roots, which divide into many knobs or knees, sending out strong fleshy fibres which penetrate deep into the ground; from these arise in the spring a cluster of heart-shaped leaves, which are hairy, and stand upon foot-stalks: between these arise the flower-stalks, which are channelled and hairy, nearly three feet high, putting out one or two smaller stalks from the side. Each stalk is terminated by one large yellow flower. The plant multiplies very fast by its spreading roots; and the seeds, if permitted to scatter, will produce plants wherever they happen to fall; so that it very soon becomes a weed in the places where it is once established. It loves a moist soil and shady situation. The roots were formerly used in medicine as alexipharmics and purifiers of the blood, but their operation was so violent that they are now entirely laid aside.

DORPAT, or DORPT, a town in Livonia, European Russia, in the government of Riga. It is situated on the small river Embach or Einbach, on the high road to St. Petersburg, and its annual fair is of great importance. A university has been established here since 1802, with a revenue of from £10,000 to £15,000 sterling. It has a library, museum, and botanic garden, liberally endowed. The environs are very agreeable. Dorpat is an ancient town. In 1704 it was taken and burned by the Russians, and in 1775 was consumed by accidental fire. Population 4500. Sixty-five miles south-west of Narva, 120 N. N. E. of Riga, and 132 south-west of St. Petersburg.

To DORR, *v. n.* Teut. *tor*, stupid. To deafen or stupify with noise. This word I find only in Skinner, says Dr. Johnson.

DORR, *n. s.* So named probably from the noise which he makes. A kind of flying insect, remarkable for flying with a loud noise.

> Some insects fly with four wings, as all the vagimpennous, or sheath-winged, as beetles and *dorrs*.
> *Browne's Vulgar Errours.*

> The *dorr* or hedge-chafer's chief marks are these: his head is small, like that of the common beetle: this, and his eyes black; his shoulder-piece, and the middle of his belly also black; but just under the wing-shells spotted with white. His wing-shells, legs, and the end of his tail, which is long and flat-pointed of a light chesnut; his breast, especially, covered with a downy hair. *Grew's Museum.*

DO'RSEL, *n. s.* } From *dorsum* the back.
DO'RSER. } A pannier; a basket or bag, one of which hangs on either side a beast of burden, for the reception of things of small bulk. It is corruptly spoken, and perhaps written, dossel.

DORSET, a township of Vermont, in Bennington county, bounded by those of Rupert on the west, Manchester on the south, and Danby on the north.

DORSETSHIRE, a county of England, is bounded on the north by Wiltshire and Somersetshire, on the east by Hampshire, on the west by Devonshire and part of Somersetshire, and on the south by the British Channel. It is a maritime county, lying between 50° 30′ and 51° 6′ N. lat., and 1° 58′ and 3° 18′ W. long. Across the centre, from north to south, it measures about thirty-six miles; and from east to west about fifty miles. It is said to contain in all about 512,154 acres. The political divisions of the county consist of divisions, hundreds, boroughs, liberties, and tithings. There are nine divisions, thirty-four hundreds, twenty-four market towns, 248 parishes, and four sea-port towns. This county is in the diocese of Bristol, and is divided into five deaneries. It is included in the western circuit, and the assizes are now held at Dorchester. According to Ptolemy and other writers, Dorsetshire under the Romans was inhabited by the Durotriges or Morini; British words implying maritime people, or dwellers on the seashore. The Saxon invaders gave the name of Dor-setta to this county, a word compounded of British and Saxon, and signifying the same as the Roman appellations. When the island was divided into Roman provinces, this county became part of Britannia Prima; and, on the establishment of the Saxons, it was included in the kingdom of Wessex. The varied beauties of this county, the mildness of its climate, and the value of its natural productions, have given to it the appellation of 'The Garden of England.' This character, however, is disputed by Mr. Stevenson, in his excellent View of the Agriculture of the county, which, he remarks, can scarcely be deemed to be so mild in its temperature, or so early in its seasons, as its latitude would lead us to expect. The fact is evident that the climate of Dorsetshire has undergone a very material alteration; and the air may now, as the same author remarks, be considered dry and salubrious rather than mild and bland; and the seasons, except in spots very sheltered or possessed of a very warm soil, are not nearly so

forward as they are in other parts of England not so far southward.

This county, in respect to soil, is naturally divided into three principal districts, viz. chalky loams, gravelly sand, and clay, or various soils on a clay basis. The chalky district commences on the borders of Somersetshire, near Crewkerne in that county, and runs in a very narrow slip towards the interior of the county, as far as the town of Eversholt, where it suddenly widens, and spreads considerably to the north of Dorchester. It then again abruptly contracts between Piddleton, south, and Bingham's Melcombe, north; but immediately once more extending itself, branches out more than half the breadth of the whole county, and extends into the county of Wilts and the borders of Hampshire. This district contains about 160,759 acres. The sand district, occupying about 85,157 acres, approaches the borders of the British Channel; and, commencing a little east of Dorchester, forms a crescent, the east horn of which terminates near Ringwood in the county of Hampshire. The clayey soils are found in different parts, west, north, and south of the county, but particularly on the northern borders, and in the western districts near Devonshire. This district contains altogether about 117,331 acres.

Of the rivers of this county we may notice the Frome, the Hooke or Owke, the Ivel, the Piddle, the Stour, the Char, the Eype, and the Wey. These three last are the rivers of Dorsetshire bordering upon Devonshire. The celebrated watering-place which is formed by the combined towns of Melcombe Regis and Weymouth, as Mr. Skrine observes, graces the exit of the Wey to the sea, remarkable for its grand semicircular beach, and its excellent as well as level sands. These advantages, and the preference often given to this place by the royal family, have raised it into high consideration; splendid rows of houses being formed, with a superb esplanade in front of them, towards the coast, for a great extent, where they command the whole of the bay, bounded by great chalky cliffs, and backed by the Dorsetshire downs. The pier of Weymouth stretches out beneath an opposite rock, crowned with its garrison, which defends the harbour from the south and west winds, offering a convenient refuge to shipping, and possessing no small portion of trade. The village and high church of Wyke Regis occupy the highest point of this ridge of hills on the west, immediately opposed to the vast protruding mass of Portland Island. The Char and the Eype, which come in succession before the Wey, have no striking points; except that Charmouth, at the exit of the former, on the great western road, is preferred by some, as a bathing-place, to Lyme, which is far more beautifully situated in its neighbourhood. The Eype, joined by the Brit from Bedminster, and another stream westward of it, falls into the sea in Bridport Harbour, a few miles below that town. These rivers all descend from the Dorsetshire downs, and their course is nearly southward. The most considerable river is the Frome, rising, like the rest, in that vast tract of downs which divides it from Somersetshire; its two channels uniting in a pleasant bourn at Maiden Newton, from whence it pursues a south-east course to Dorchester; fed afterwards by various streams from the hollows in the downs in the south, and, meeting the Piddle from the north as it turns more and more eastward to reach Wareham, it forms the great expanse of water constituting Poole Harbour. The country through which this river takes its course is but thinly inhabited, and bare of wood; but the range of downs that extend parallel with the latter part of its course, separating its vale from the coast, is formed by Nature in the boldest manner, containing many tumuli and ancient encampments, with the singular curiosity of one perfect Roman amphitheatre near Dorchester, within view of the old fortress of Maiden Castle. Dorchester may be called a pleasant town from the neatness of its streets, and, above all, from the avenues and planted walks by which it is environed and approached, after the manner of many French towns, which have an increased effect in the midst of so bare a country. Wild heaths succeed to the downs before the Frome reaches the sea; and Poole Harbour is a very extensive sheet of water, bounded towards the south-west by the Isle of Purbeck, in which the towers of Corfe Castle make a considerable figure. Poole is a flourishing port on its north shore. The Stour finds its source in six streams at Stourton in Wiltshire, three of which are in the park of Stourhead. Though perhaps somewhat less than the Frome, this is certainly by far the pleasantest of the Dorsetshire streams, forming in its passage the charming dell beneath the cliff of Brianstone. The vicinage of this river in particular, and indeed Dorsetshire in general, is noted for a profusion of fine seats, and a race of noblemen and country gentlemen who exercise the splendid and captivating hospitality of past ages, yet uncontaminated by the encroachment of manufactures. This beautiful river yields trout, eels, and tench; and the author now quoted, Mr. Hutchins, remarks that the sea on the Dorsetshire coast abounds with sturgeons, turbots, mackarel, plaice, soles, basse, whitings, congers, porpoises, lobsters, red and gray mullet, thornbacks, piper or gurnet, trill or scollop, shrimps, prawns, and oysters. The rivers furnish salmon, pike, carp, gudgeons, perch, &c. The Bay of Weymouth opens immediately below Portland; and that tract of Dorsetshire called the Isle of Purbeck stretches out on the opposite side to the south-east, terminating in the point called St. Alban's Head. The range of cliffs which bound this coast, as well as the shoals called The Race of Portland, are extremely dangerous to shipping, and wrecks are very frequent here in stormy seasons. The Cove of Lulworth presents an occasional refuge to small vessels, but its entrance is so narrow as to render it of little use. Immediately behind it, Lulworth Castle occupies a charming elevation, and exhibits a grand baronial pile, in the midst of some ornamented grounds, commanding the sea with good effect, through a gap in the rocks. In the centre of the Isle of Purbeck, Corfe Castle displays its ruined towers on a high eminence with great majesty; and this pleasant district is inhabited

by several respectable families, whose seats make a handsome appearance; the Grange being the most conspicuous. Turning round the point of Purbeck, towards the north, the Bay of Strudland fronts the east, within which is the great expanse of Poole Harbour, marked with several islands, and distinguished by the port of Poole. Mr. Hutchins remarks of the mineral waters, that 'they are chalybeate at Farringdon, Aylwood, and Corfe; sulphureous at Sherford, Morden, Nottington, and Sherborne; salt at Chilcombe; and petrifying at Sherborne and Bothenwood, near Winborne-Minster.' There are no canals in this county, though Mr. Stevenson says that a navigable one is intended to pass from Somersetshire by Chardstock and Dorchester to the sea, near Beer and Seaton, in the county of Devon. The principal produce of Dorsetshire are its fine sheep, its extensive mackarel fishery, and the celebrated stone quarries in the peninsula or isle of Portland. There are no metallic mines nor coals of any value. The 'pebbly desert,' called the Chesil Bank, is, as Dr. Maton remarks, one of the most extraordinary ridges or shelves of pebbles in Europe, and perhaps the longest, except that of Memel in Polish Prussia. Its length is supposed to be about seventeen miles; its breadth in some places near a quarter of a mile.

Dorsetshire sends twenty members to parliament: viz. two for the county, two for Dorchester, two for Poole, two for Lyme Regis, four for Weymouth and Melcombe Regis, two for Bridport, two for Shaftesbury, two for Wareham, and two for Corfe Castle.

This county has produced among other eminent persons, Anthony Ashley Cooper, Earl of Shaftesbury—Christopher Pitt, a very ingenious poet and divine, born at Blandford, in 1699, died 1748—the learned and celebrated Bishop Stillingfleet—Dr. Thomas Sydenham, one of the most learned and rational physicians of his time, who died 1689—Sir James Thornhill, nephew to the above, an eminent painter—The celebrated Archbishop Wake—The Rev. Samuel Wesley, father to the celebrated founders of Methodism—Thomas Creech, the poet—Matthew Prior, &c. &c.

The principal manufactory in this county is that of flax and hemp, near Bridport and Bedminster. These produce twine, string, and cordage in general; also nets, sacking, bags, &c. There are also several woollen manufactories, as also for twisting and making up raw silk into skeins. Shirt-buttons are manufactured at Shaftesbury; and malting and brewing are carried on at Wareham, Dorchester, &c.

DORSI'FEROUS, *adj.* } Lat. *dorsum* and
DORSI'PAROUS. } *fero*, or *pario*. Having the property of bearing or bringing forth on the back. It is used of plants that have the seeds on the back of their leaves, as fern; and may be properly used of the American frog, which brings forth young from her back.

DORSTENIA, contrayerva, a genus of the monogynia order and tetrandria class of plants; natural order fifty-third, scabridæ: receptacle common, monophyllous, and carnous; the seeds lying singly in the carnous substances. There are eleven species, all low herbaceous plants, growing in the warm countries of America. The root is used in medicine. It is full of knots, an inch or two in length, about half an inch thick; externally of a reddish-brown color, and pale within; long, tough, slender fibres shoot out from all sides of it, which are generally loaded with small round knots. The root has a peculiar aromatic smell, and a somewhat astringent, warm, bitterish taste, with a light and sweetish kind of acrimony when chewed. The fibres have little taste or smell; the tuberous part, therefore, should only be chosen. Contrayerva is one of the mildest of alexipharmics, and is a useful diaphoretic. Its virtues are extracted both by water and rectified spirit, and do not arise by evaporation with either. The plants cannot be propagated in this country without the greatest difficulty.

DORSUM, the back, in anatomy, comprehends all the posterior parts of the body, from the neck to the buttocks. See ANATOMY.

DORT, or DORDRECHT, a city of the Netherlands, in the department of Delft, South Holland. It is seated in a small island, formed by the rivers Meuse, Merue, Rhine, and Linghe. The Meuse, on which it stands, gives it a good harbour, and separates it from the islands of Ysselmonde and Ablas. It is divided from Beyerland by a canal. The harbour is very commodious for the merchandise which comes down the Rhine and the Meuse. Its strength consists in being surrounded with water, its walls being old and decayed. Dort is well built with brick, and had formerly the exclusive right of coining money. The church of Notre Dame is a good building, the tower lofty, and furnished with musical chimes. There is another church, dedicated to St. Nicholas, built in 1568. It had likewise, before the revolution, several religious houses for monks and nuns; and the town house is a fine building. It is at present the staple town for wines, particularly Rhenish, though its exclusive privileges in this respect are abolished. It was detached from the main land in 1421, on the 17th November, by a flood occasioned by the breaking down of the dyke, which overwhelmed seventy villages, and about 100,000 persons. However, by time, and the industry of the inhabitants, a great part of the land is recovered. It has two principal canals, namely, the New and Old Haven, by which heavy-loaded vessels may enter into the city. Over the Old Haven is a large bridge, well built with brick. Dort was almost reduced to ashes in 1457, there being then consumed 2000 houses, with the halls, hospital, and church of Notre Dame. The company of tradesmen, and some other communities, elect the magistrates, and name one part of the members of the city council. In former times, Dort was the residence of the counts of Holland; and, on the foundation of the Dutch republic, it became the first in rank of the towns of Holland at the States-general.

This city is famous for the meeting of the clergy, called the synod of Dort, in which the Calvinists obtained a sentence against the Arminians, who were called Remonstrants. The dispute between the contending parties occasioned disorders, skirmishes, and murders, in

most of the principal cities. Those ministers, who would not subscribe to the decree of the synod, were banished, of whom there were above 100. An important object of commerce here, at present, is the timber brought in large floats down the Rhine, and either exported to England, Spain, and Portugal, or prepared for different uses in the saw-mills which skirt the town. Here are several excellent docks for ship-building, and a brisk trade is carried on in the yarn and linen, as well as in the salt manufacture. The salmon-fisheries here established are also productive.

The brothers, De Witt, were sons of the burgomaster of this place; and the celebrated Vossius was once superintendent of the college here. Population about 20,000. Dort lies eleven miles south-east of Rotterdam, and thirty-seven west of Amsterdam.

DORT, SYNOD OF, a national synod, summoned by authority of the states-general, the provinces of Holland, Utrecht, and Overyssel excepted, and held at Dort in 1618. The most eminent divines of the United Provinces, and deputies from the churches of England, Scotland, Switzerland, Bremen, Hessia, and the Palatinate, assembled on this occasion, in order to decide the controversy between the Gomarists or Calvinists, and Arminians; the latter were declared corrupters of the true religion. But the authority of this synod was far from being universally acknowledged either in Holland or in England. The provinces of Friesland, Zealand, Utrecht, Guelderland, and Groningen, could not be persuaded to adopt their decisions; and they were opposed by king James I. and archbishop Laud, in England. The reformed churches in France, though at first disposed to give a favorable reception to the decisions of this famous synod, in process of time espoused doctrines very different from those of the Gomarists; and the churches of Brandenburgh and Bremen would not suffer their doctors to be tied down to the opinions and nets of the Dutch divines. The liberty of private judgment, with respect to the doctrines of predestination and grace, which the spirit that prevailed among the divines of Dort seemed so much adapted to discourage and suppress, acquired new vigor in consequence of the arbitrary proceedings of this assembly.

DORTMUND, a rich, populous, and once imperial city of Germany, in the circle of Westphalia, and territory of Nassau-Dillenborg, to which it was ceded in 1802; but it was ceded to Prussia in 1815. It is pretty large, but not well built. Formerly it was one of the Hanse Towns. The territory was also formerly a county, and had lords of its own; but since 1504 it has been possessed entirely by the city. Here are four Lutheran churches, one Catholic, a Dominican and a Franciscan monastery, a nunnery, three hospitals, and a provincial academy. Population 10,000. It is seated on the Emster, forty miles south-east of Cologne.

DORYPHORI; from δορυ, a spear, and φερω, to bear; an appellation given to the life-guard or cohort of the Roman emperors. They were held in such estimation as frequently to have the command of armies conferred on them. It was usual also for chief commanders to have their doryphori or life-guards to attend them.

DOSE, *v. n.* Fr. *dose*; Ital. Teut. Span. Port. and Lat. *dosis*, from Gr. δοσις à διδοναι, to give. A given quantity of medicine, or any other thing; hence any thing nauseous.

> No sooner does he peep into
> The world, but he has done his doe;
> Married his punctual *dose* of wives,
> Is cuckolded, and breaks, or thrives. *Hudibras.*

> The too vig'rous *dose* too fiercely wrought,
> And added fury to the strength it brought.
> *Dryden's Virgil.*

> If you can tell an ignoramus in power and place that he has a wit and understanding above all the world, I dare undertake that, as fulsome a *dose* as you give him, he shall readily take it down. *South.*

> In a vehement pain of the head he prescribed the juice of the thapsia in warm water, without mending the *dose*. *Arbuthnot.*

> We pity or laugh at those fatuous extravagants, while yet ourselves have a considerable *dose* of what makes them so. *Granville.*

DOSITHEUS, the chief of a faction among the Samaritans, mentioned by Origen, Epiphanius, Jerome, and other Greek and Latin fathers. But the learned are not at all agreed as to the time wherein he lived. St. Jerome, in his Dialogue against the Luciferians, places him before our Saviour; in which he is followed by Drusius, who, in his answer to Serrarius, places him about the time of Sennacherib, king of Assyria. But Scaliger will have him posterior to our Saviour's time. And Origen intimates him to have been contemporary with the apostles; where he observes, that he endeavoured to persuade the Samaritans that he was the Messiah foretold by Moses. He had many followers; and his sect was still subsisting at Alexandria at the time of the patriarch Eulogius, as appears from a decree of that patriarch published by Phocius. In that decree, Eulogius accuses Dositheus of injuriously treating the ancient patriarchs and prophets, and attributing to himself the spirit of prophecy. He makes him contemporary with Simon Magus, and accuses him of corrupting the Pentateuch in divers places, and of composing several books directly contrary to the law of God. Archbishop Usher takes Dositheus to have been the author of all the changes made in the Samaritan Pentateuch, which he argues from the authority of Eulogius. But all we can justly gather from the testimony of Eulogius is, that Dositheus corrupted the Samaritan copies since used by that sect; but that corruption did not pass into all the copies of the Samaritan Pentateuch now in use among us, many of which vary but little from the Jewish Pentateuch. And in this sense, we are to understand that passage in a Samaritan chronicle, where it is said, that Dousis, i. e. Dositheus, altered several things in the law of Moses. The author of that chronicle, who was a Samaritan by religion, adds, that their high priest sent several Samaritans to seize Dousis and his corrupted copy of the Pentateuch. Epiphanius takes Dositheus to have been a Jew by birth, and to have abandoned the Jewish party for that of the Samaritans. He imagines him likewise

to have been the author of the sect of the Sadducees; which is inconsistent with his being later than our Saviour; and yet the Jesuit Serrarius makes Dositheus the master of Sadoc, from whom the Sadducees are derived. Tertullian observes, that Dositheus was the first who dared to reject the authority of the prophets, by denying their inspiration. But he charges that as a crime peculiar to this sectary, which in reality is common to the whole sect, who never allowed any but the five books of Moses to be divine.

DO'SSIL, *n. s.* Corrupted from *dorsel*, something laid upon the part. A pledget; a nodule or lump of lint to be laid on a sore.

Her complaints put me upon dressing with such medicaments as basilicon, with præcipitate, upon a *dossil*. *Wiseman.*

DOT, *v. a.*, *v. n.* & *n. s.* Derived by Skinner from Ger. *dotter*, the white of an egg; and interpreted by him a grume of pus. It has now no such signification, and seems rather corrupted from jot a point. A small point or spot made to mark any place in a writing. To mark with specks; to make dots or spots.

DO'TAL, *adj.* Lat. *dotalis*. Relating to the portion of a woman; constituting her portion; comprised in her portion.

Shall I, of one poor *dotal* town possest,
My people thin, my wretched country waste,
An exiled prince, and on a shaking throne,
Or risk my patron's subjects, or my own?
Garth's Ovid.

DOTE, *v. n.* / DO'TAGE, *n. s.* / DO'TARD, *n. s.* / DO'TED, *adj.* / DO'TER, *n. s.* / DO'TINGLY, *adv.* } Goth. *dotla*; Fr. *dotter*, or *radoter*; Belgic, *doten*; to be dozing. To have the mind impaired by age or otherwise; to have extreme or foolish fondness; often used with *on* or *upon*. Doted is stupid: dotage is a state of imbecility or decayedness of mind; excessive fondness. Dotard and doter, he who is thus imbecile.

A sword is upon the liars, and they shall *dote*; a sword is upon her mighty men, and they shall be dismayed. *Jer.* i. 36.

His senseless speech and *doted* ignorance
The prince had marked well. *Spenser.*

Dotard, said he, let be thy deep advise,
Seems that through many years thy wits thee fail,
And that weak old hath left thee nothing wise,
Else never should thy judgment be so frail.
Faerie Queene.

Unless the fear of death make me *dote*,
I see my son. *Shakspeare. Comedy of Errours.*

I have long loved her, and bestowed much on her, followed her with a *doting* observance. *Shakspeare.*

If in black my lady's brow be deckt,
It mourns that painting and usurping air
Should ravish *doters* with a false aspect;
And therefore is she born to make black fair. *Id.*

O vanity,
How are thy painted beauties *doted* on,
By light and empty idiots! *Ben Jonson.*

The soul in all hath one intelligence,
Though too much moisture in an infant's brain,
And too much driness in an old man's sense,
Cannot the prints of outward things retain:
Then doth the soul want work, and idle set;
And this we childishness and *dotage* call. *Davies.*

No, no; I know the world too well to *dote* upon it.
Bp. Hall. Letter from the Tower.

What should a bald fellow do with a comb, a dumb *doter* with a pipe, or a blind man with a looking-glass?
Burton.

Our *doters* upon red and white are incessantly perplexed by the incertainty both of the continuance of their mistress's kindness, and of the lasting of her beauty. *Boyle.*

All the beauties of the court besides
Are mad in love, and *dote* upon your person.
Denham

Time has made you *dote*, and vainly tell,
Of arms imagined in your lonely cell:
Go, be the temple and the gods your care;
Permit to men the thought of peace and war.
Dryden's Æneid.

That he, to wedlock *dotingly* betrayed,
Should hope in this lewd town to find a maid!
Id. Juvenal.

We *dote* upon this present world, and the enjoyments of it; and 'tis not without pain and fear, and reluctancy, that we are torn from them, as if our hopes lay all within the compass of this life. *Burnet.*

The sickly *dotard* wants a wife,
To draw off his last dregs of life. *Prior.*

When an old woman begins to *dote*, and grow chargeable to a parish, she is turned into a witch, and fills the country with extravagant fancies.
Addison's Spectator.

O death all eloquent! you only prove
What dust we *dote* on, when 'tis man we love.
Pope.

Some, for renown, or scraps of learning *doat*,
And think they grow immortal as they quote.
Young.

In vain their gifts the bounteous seasons pour,
The fruit autumnal and the vernal flower,
With listless eyes the *dotard* views the store,
He views and wonders that they please no more.
Johnson. Vanity of Human Wishes.

A strict accountant of his beads,
A subtle disputant on creeds;
His *dotage* trifled well:
Yet better had he neither known
A bigot's shrine, nor despot's throne.
Byron.

DO'TTARD, *n. s.* This word seems to signify a tree kept low by cutting; or is perhaps a false spelling of dotard, and means any thing decayed.

For great trees, we see almost all overgrown trees in church-yards, or near ancient buildings, and the like, are pollards and *dottards*, and not trees at their full height. *Bacon.*

DOTTEREL, *n. s.* From dote. The name of a bird that mimics gestures.

We see how ready apes and monkeys are to imitate all motions of man; and in catching of *dotterels*, we see how the foolish bird playeth the ape in gestures. *Bacon.*

DOUAY, a city of France, in the department of the North (of which it was for some time the capital), and ci-devant French Flanders. It has a fine arsenal, a foundry for cannon, and a military and artillery school. The fort of Scarpe, on the river of that name, within cannon-shot, serves for a citadel. It has three famous colleges, incorporated of late into one; and the great squares in the centre of the city, and the principal church, are worthy of notice. It was

erected into a university by Philip II. of Spain, who founded in it a seminary for English Roman Catholics in 1569. In 1667 it was taken from the Spaniards by Louis XIV. in person. The allies, under the duke of Marlborough, took it in 1710; but it was retaken by the French in 1711, after the suspension of arms between Great Britain and France. During the late wars it was the scene of several operations. It has a canal communication with the Deule, and contains 18,000 inhabitants, many of whom are employed in the manufactures of linen, cotton, lace, and thread. It is fifteen miles north-west of Cambray, and eighty-three N.N.E. of Paris.

DOUB'LE, *v. a.* & *v. n.* DOUB'LE-BITING, *adj.* DOUB'LE-DEALER, *n. s.* DOUB'LE-DIE, *v. a.* DOUB'LE-FOUNTED, *adj.* DOUB'LE-HANDED, DOUB'LE-HEADED, DOUB'LE-LOCKED, DOUB'LE-MINDED, DOUB'LE-MINDEDNESS, *n. s.* DOUB'LE-PLEA, DOUB'LE-QUARREL, DOUB'LER, DOUB'LE-SHINING, *adj.* DOUB'LE-TONGUED, DOUB'LY, *adv.* Fr. *double*; Sp. *doble*; Dut. *dobbel*; Germ. *doppel*; from Lat. *duplex*; *duo* and *plico*, to fold. To repeat; add the same quantity to a given quantity; to contain twice the quantity; to add; to fold; to go round a cape or headland: as a neuter verb, to swell or increase to twice the quantity: to turn back or about: as a substantive, twice the number; very strong beer; a trick or artifice. Doubleness is the state of being double; duplicity. The compounds seem obvious in their meaning.

The prestis that ben wel gouernour is be thei had worthi to *double* onour, moost thei that traueilen in word and teching. *Wiclif.* i. *Tymo.* 5.

If the thief be found, let him pay *double*. *Exodus.*

Thou shalt *double* the curtain in the tabernacle. *Id.*

A *double-minded* man is unstable in all his ways. *James.*

The deacons must be grave, not *double-tongued*, not given to much wine, nor greedy of filthy lucre. 1 *Tim.*

He was like a maister or a pope:
Of *double* worsted was his semicope,
That round was as a belle out of the presse,
Somewhat he lisped for his wantonnesse.
Chaucer. Prol. to Cant. Tales.

He oft finds med'cine who his griefe imparts,
But *double* griefes afflict concealing harts,
As raging flames who striveth to suppress.
Spenser. Faerie Queene.

If you think well to carry this as you may, the *doubleness* of the benefit defends the deceit from reproof. *Shakspeare.*

Rumour doth *double* voice and echo
The numbers of the feared. *Id. Henry IV.*

I' the presence
He would say untruths, and be ever *double*
Both in his words and meaning. *Id. Henry VIII.*

Here's a pot of good *double*, neighbour: drink and fear not your man. *Id. Henry VI.*

Thou shalt not be the worse for me; there's gold. —But that it would be *double-dealing*, Sir I would you could make it another. *Id. Twelfth Night.*

Sailing along the coast, he *doubled* the promontory of Carthage, yet famous for the ruins of that proud city. *Knolles.*

Great honours are great burthens; but on whom
They are cast with envy, he doth bear two loads:
His cares must still be *double* to his joys,
In any dignity. *Ben Jonson's Catiline.*

It is a curiosity also to make flowers *double*, which is effected by often removing them into new earth; as, on the contrary part, *double* flowers, by neglecting, and not removing, prove single. *Bacon's Natural History.*

Under the line the sun crosseth the line, and maketh two summers and two winters: but in the skirts of the torrid zone it *doubleth* and goeth back again, and so maketh one long summer. *Id.*

Here the *double-founted* stream
Jordan, true limit eastward. *Milton.*

And if one power did not both see and hear,
Our sights and sounds would always *double* be. *Davies.*

Jarres concealed are half reconciled; which, if generally known, 'tis a *double* task, to stop the breach at home, and men's mouths abroad. *Fuller.*

Double-dealers may pass muster for awhile; but all parties wash their hands of them in the conclusion. *L'Estrange.*

Our foe's too proud the weaker to assail,
Or *doubles* his dishonour if he fail. *Dryden.*

He saw proud Arcite and fierce Palemon
In mortal battle *doubling* blow on blow;
Like lightning flamed their falchions to and fro. *Id.*

Now we have the Cape of Good Hope in sight, the trade-wind is our own, if we can but *double* it. *Id.*

Who knows which way she points?
Doubling and turning like a hunted hare,
Find out the meaning of her mind who can. *Id.*

Throw Ægypt's by, and offer in the stead,
Offer—the crown on Berenice's head:
I am resolved to *double* till I win. *Id. Tyrannic Love.*

Reverend, fat, old gouty friar,
With a paunch swoln so high, his *double* chin
Might rest upon it. *Id. Spanish Friar.*

But most their looks on the black monarch bend,
His rising muscles and his brawn commend;
His *double-biting* ax, and beamy spear,
Each asking a gigantic force to rear. *Id. Fables.*

For much she feared the Tyrians *double-tongued*,
And knew the town to Juno's care belonged. *Id. Virgil.*

Yes, I'll to the royal bed,
Where first the mysteries of our love were acted,
And *double-die* it with imperial crimson. *Id. and Lee.*

This power of repeating or *doubling* any idea we have of any distance, and adding it to the former, as often as we will, without being ever able to come to any stop or stint, is that which gives us the idea of immensity. *Locke.*

All things being *double-handed*, and having the appearances both of truth and falsehood, where our affections have engaged us, we attend only to the former. *Glanville's Scepsis.*

In all the four great years of mortality above mentioned, I do not find that any week the plague increased to the *double* of the precedent week above five times. *Graunt's Mortality.*

He was
Among the rest that there did take delight
To see the sports of *double-shining* day. *Sidney.*

'Tis observed in particular nations, that within the space of three hundred years, notwithstanding all casualties, the number of men *doubles*. *Burnet's Theory.*

Haply at night he does with horror shun
A widowed daughter, or a dying son:
His neighbour's offspring he to-morrow sees,
And *doubly* feels his want in their increase. *Prior.*

He bought her sermons, psalms, and graces,
And *doubled* down the useful places. *Id.*

He immediately *double-locked* his door, and sat down carefully to reading and comparing both his orders. *Tatler.*

These men are too well acquainted with the chase, to be flung off by any false steps or *doubles*. *Addison.*

Our poets have joined together such qualities as are by nature most compatible; valour with anger, meekness with piety, and prudence with dissimulation: this last union was necessary for the goodness of Ulysses; for, without that, his dissimulation might have degenerated into wickedness and *double-dealing*. *Broome's View of Epic Poetry.*

I am not so old in proportion to them as I formerly was, which I can prove by arithmetick; for then I was *double* their age, which now I am not. *Swift.*

So keen thy hunters, and thy scent so strong,
Thy turns and *doublings* cannot save thee long. *Id.*

The sum of forty thousand pounds is almost *double to* what is sufficient. *Id. Drap. Letters.*

Double-plea is that in which the defendant alledges for himself two several matters, in bar of the action whereof either is sufficient to effect his desire in debarring the plaintiff. *Cowell.*

Double-quarrel, is a complaint made by any clerk or other to the archbishop of the province, against an inferiour ordinary, for delaying justice in some cause ecclesiastical. The effect is, that the archbishop directs his letters, under the authentical seal, to all clerks of his province, commanding them to admonish the said ordinary within nine days to do the justice required, or otherwise to cite him to appear before him or his official; and lastly to intimate to the said ordinary, that if he neither performs the thing enjoined, nor appears at the day assigned, he himself will proceed to perform the justice required. And this seems to be termed a *double-quarrel*, because it is most commonly made against both the judge, and him at whose petition justice is delayed. *Id.*

Man is frail,
Convulsions rack his nerves, and cares his breast;
His flying life is chased by ravening pains,
Through all his *doubles*, in the winding veins.
Blackmore.

Lilies are by plain direction
Emblems of a *double* kind;
Emblems of thy fair complection
Emblems of thy fairer mind. *Cotton.*

The double rich scarlet nonsuch is a large *double-headed* flower, of the richest scarlet colour. *Mortimer.*

Every man hath a weak side. Every wise man knows where it is, and will be sure to keep a *double* guard there. *Mason.*

Since hope but sooths to *double* my distress,
And every moment leaves my little less.
Johnson's London.

Far and wide
Temple and tower went down, nor left a site:—
Chaos of ruins! who shall trace the void,
O'er the dim fragments cast a lunar light,
And say, 'here was, or is,' where all is *doubly* night!
Byron.

Double Employment, in music, a name given by M. Rameau to the two different manners in which the chord of the subdominant may be regarded and treated, viz. as the fundamental chord of the sixth superadded, or as the chord of the great sixth, inverted from a fundamental chord of the seventh. In reality, the chords carry exactly the same notes, are figured in the same manner, are employed upon the same chord of the tone, in such a manner, that frequently we cannot discern which of the two chords the author employs, but by the assistance of the subsequent chord, which resolves it, and which is different in these different cases. To make this distinction, we must consider the diatonic progress of the two notes which form the fifth and the sixth, and which, constituting between them the interval of a second, must one or the other constitute the dissonance of the chord. Now this progress is determined by the motion of the bass. Of these two notes, then, if the superior be the dissonance, it will rise by one gradation into the subsequent chord, the lower note will keep its place, and the higher note will be a superadded sixth. If the lower be the dissonance, it will descend into the subsequent chord, the higher will remain in its place, and the chord will be that of the great sixth. See the two cases of the double employment in Rousseau's Musical Dictionary, plate D. fig. 12.

Double Fiche, or Double Fichy, in heraldry, the denomination of a cross, when the extremity has two points; in contradistinction to fiché, where the extremity is sharpened away to one point.

Double Octave, in music, an interval composed of fifteen notes in diatonic progression, and which, for that reason is called a fifteenth. 'It is,' says Rousseau, 'an interval composed of two octaves, called by the Greeks disdiapason.'

DOUB'LET, *n. s.* from double. The inner garment of a man; the waistcoat; so called from being double for warmth, or because it makes the dress double.

What a pretty thing a man is, when he goes in his *doublet* and hose, and leaves off his wit! *Shakspeare.*

His *doublet* was of sturdy buff,
And though not sword, yet cudgel-proof.
Hudibras.

Two; a pair.

Those *doublets* on the sides of his tail seem to add strength to the muscles which move the tail fins. *Grew's Museum.*

It is common enough to see a countryman in the *doublet* and breeches of his great grand-father. *Addison on Italy*

They do but mimic ancient wits at best,
As apes our grandsires, in their *doublets* drest.
Pope.

Doublet, among lapidaries, implies a counterfeit stone composed of two pieces of crystal,

and sometimes glass softened, together with proper colors between them; so that they make the same appearance to the eye as if the whole substance of the crystal had been tinged with these colors. The impracticability of imparting tinges to the body of crystals, while in their proper and natural state, and the softness of glass, which renders ornaments made of it greatly inferior in wear to crystal, gave inducements to the introduction of coloring the surface of crystal wrought in a proper form, in such a manner, that the surfaces of two pieces so colored being laid together, the effect might appear the same as if the whole substance of the crystal had been colored. The crystals, and sometimes white transparent glass so treated, were called doublets; and at one time were greatly in use, on account of the advantages, with respect to wear, such doublets had, when made of crystal, over glass, and the brightness of the colors which could with certainty be given to counterfeit stones this way, when colored glass could not be procured, or at least not without a much greater expense. Doublets have not indeed the property which the others have, of bearing to be set transparent, as is frequently required in drops of ear-rings and other ornaments: but when mounted in rings, are used in such manner that the sides of the pieces where the joint is made cannot be inspected, they are, when formed of crystal, preferable to the colored glass; and the art of managing them is therefore, in some degree, of the same importance with that of preparing glass for counterfeiting gems; and is therefore properly an appendage to it, as being entirely subservient to the same intention.

DOUBLETS, a game on dice within tables; the men, which are only fifteen, being placed thus. Upon the size, cinque, and quatre points, there stand three men apiece; and upon the trey, deuce, and ace, only two. He that throws highest has the benefit of throwing first, and what he throws he lays down, and so does the other: what the one throws, and has not, the other lays down for him, but on his own account; and thus they do till all the men are down, and then they bear. He that is down first, bears first; and will doubtless win the game, if the other throws not doublets to overtake them: which he is sure to do, since he advances or bears as many as the doublets make, viz eight for two fours.

DOUBLING, among hunters, is applied to a hare, which is said to double, when she keeps in plain fields, and winds about to deceive the hounds.

DOUBLING, in the manege, a term used of a horse, who is said to double his reins, when he leaps several times together to throw his rider.

DOUBLING, in the military art, is the putting two ranks or files of soldiers into one. Thus, when the word of command is, Double your ranks, the second, fourth, and sixth ranks march to the first, third, and fifth, so that the six ranks are reduced to three, and the intervals between the ranks become double what they were before.

DOUBLING UPON, in naval tactics, the act of inclosing any part of a hostile fleet between two fires, or of cannonading it on both sides. It is usually performed by the van or rear of that fleet which is superior in number, taking the advantage of the wind, or other circumstances, and tacking or veering round the van or rear of the enemy, who will thereby be exposed to great danger, and can scarcely avoid being thrown into general confusion.

DOUBLOON', *n. s.* Fr. A Spanish coin containing the value of two pistoles.

DOUBS, a department of France, bounded on the north by those of the Upper Saone and Upper Rhine; on the south-west by the department of Jura, and on the north-west by that of Upper Saone. It comprehends part of the ci-devant province of Franche Comté. Besançon is the capital.

DOUBT, *v. a., v. n.* & *n. s.* } Fr. *douter*; from Lat. *dubito*, i. e. *duo* and *eo*, *ito*, to go.
DOUBT'ER, *n. s.* }
DOUBT'FUL, *adj.* }
DOUBT'FULLY, *adv.* }
DOUBT'FULNESS, *n. s.* } To hold questionable or in danger; to fear; suspect; distrust; fill with distrust and fear.
DOUBT'ING, *n. s.* }
DOUBT'INGLY, *adv.* }
DOUBT'LESS, *adj.* & *adv.* }

As a neuter verb, to question: be in uncertainty; hesitate; waver; suspect; sometimes taking *of*. As a substantive it means, uncertainty; difficulty of determination; suspension of mind, as well as the causes of it; and the effects, danger and fear. Doubtless is, without doubt. The examples will make the other derivatives plain.

But axe he in faith, and *doute* nothing, for he tha *doutith* is lyk to a waive of the see which is moued and borun aboute of wynd. *Wiclif. James* i.

I desire to be present with you now, and to change my voice; for I stand in *doubt* of you. *Gal.* iv. 20.

Knowing how *doubtfully* all allegories may be construed, and this book of mine being a continual allegory, I have thought good to discover the general intention. *Spenser.*

Even in matters divine, concerning some things, we may lawfully *doubt* and suspend our judgment, inclining neither to one side or other; as, namely, touching the time of the fall both of man and angels. *Hooker.*

Christ promiseth his Spirit shall be in him to whom he giveth it a spring of water running unto eternal life; also that he witnesseth them which believe in him already to be passed all *doubt* and death, and to be presently in eternal life.
MS. Notes of Bradford the Martyr

Friendship is a thing so rare, as it is *doubted* whether it be a thing indeed or but a word.
Sir P. Sidney.

The virtues of the valiant Caratach,
More *doubt* me than all Britain.
Beaumont and Fletcher.

Our *doubts* are traitors,
And make us lose, by fearing to attempt
The good we oft might win. *Shakspeare.*

Methinks I should know you, and know this man;
Yet I am *doubtful*. *Id. King Lear.*

Doubting things go ill, often hurts more
Than to be sure they do. *Id. Cymbeline.*

He did ordain the interdicts and prohibitions which we have to make entrance of strangers, which at that time was frequent, *doubting* novelties and commixture of manners. *Bacon.*

In handling the right of a war, I am not willing to intermix matter *doubtful* with that which is out of *doubt*; for, as in capital causes, wherein but one man's life is in question, the evidence ought to be clear; so much more in a judgment upon a war, which is capital to thousands. *Id.*

Whatsoever a man imagineth *doubtingly*, or with fear, must needs do hurt, if imagination have any power at all; for a man representeth that oftener that he feareth, than the contrary. *Id. Natural History.*

Solyman said he had hitherto made war against divers nations, and always had the victory, whereof he *doubted* not now also.
Knolles's History of the Turks.

What fear we then, why *doubt* we to incense
His utmost ire? *Milton.*

He from the terror of this arm so late
Doubted his empire. *Id. Paradise Lost.*

Thus they their *doubtful* consultations ended.
Milton.

We have sustained one day in *doubtful* fight,
What heaven's high Lord had powerfullest. *Id.*

I *doubt* not to make it appear, to be a monstrous folly to deride holy things. *Tillotson.*

All their desires, deserts, or expectations, the Conqueror had no other means to satisfy, but by the estates of such as had appeared open enemies to him, and *doubtless* many innocent persons suffered in this kind. *Hale's Common Law.*

Nor did the goddess *doubtfully* declare
Her altered mind, and alienated care. *Dryden.*

At first the tender blades of grass appear,
And buds, that yet the blast of Eurus fear,
Stand at the door of life and *doubt* to clothe the year.
Id.

Those who have examined it, are thereby got past *doubt* in all the doctrines they profess. *Locke.*

In arguing, the opponent uses as comprehensive and equivocal terms as he can, to involve his adversary in the *doubtfulness* of his expressions: and therefore the answerer, on his side, makes it his play to distinguish as much as he can. *Id.*

Let no man, while he lives here in the world, *doubt* whether there is any hell or no, and thereupon live so, as if absolutely there were none. *South.*

In *doubtful* cases, reason still determines for the safer side; especially if the case be not only *doubtful*, but also highly concerning, and the venture be a soul and an eternity. *Id.*

Doubtless many men are finally lost, who yet have no men's sins to answer for but their own. *Id.*

Can we conclude upon Luther's instability, because in a single notion, no way fundamental, an enemy writes that he had some *doubtings*? *Atterbury.*

The king did all his courage bend
Against those four which now before him were,
Doubting not who behind him doth attend. *Daniel.*

This is enough for a project, without any name; I *doubt* more than will be reduced into practice. *Swift.*

Most of his philosophy is in broken sentences, delivered with much *doubtfulness*. *Baker on Learning.*

To teach vain wits a science little known,
To admire superior sense, and *doubt* their own.
Pope.

Doubtless, oh guest! great laud and praise were mine,
If after social rites and gifts bestowed,
I stained my hospitable hearth with blood.
Id. Odyssey.

Though *doubtfulness* or uncertainty seems to be a medium between certain truth and certain falsehood in our minds, yet there is no such medium in things themselves. *Watts.*

Hippocrates commends the flesh of the wild sow above the tame; and no *doubt* but the animal is more or less healthy, according to the air it lives in.
Arbuthnot on Aliments.

Should reason guide thee with her brightest ray,
And pour on misty *doubt* resistless day;
Yet hope not life from grief or danger free,
Nor think the doom of man reversed for thee.
Johnson. Vanity of Human Wishes.

If I were to form a judgment from experience rather than theory, I should *doubt* much whether the capacity for, or even the possession of, a seat in parliament, did really convey much of power to be properly called political. *Burke.*

But dreadful is their doom, when *doubt* has driven
To censure Fate and pious Hope forego:
Like yonder blasted boughs by lightning riven,
Perfection, beauty, life, they never know;
But frown on all that pass, a monument of woe.
Beattie.

Here Cocks heroic burn with rival rage,
And Quails with Quails in *doubtful* fight engage;
Of armed heels and bristling plumage proud,
They sound the' insulting clarion shrill and loud.
Darwin.

Well was taught my brow that pride serene
Which looks no triumph where no *doubt* had been;
That easy scorn, all tranquil as before,
Which speaks no insult, and insults the more;
And with calm air, the surest to torment,
Steals angry Spite's last torment, to resent.
Dr. T. Brown.

Doubting, the act of withholding our assent from any proposition on suspicion that we are not able peremptorily to decide between the reasons for and against it. Doubting is distinguished by the schoolmen into two kinds, dubitatio sterilis, and dubitatio efficax. The former is that where no determination ensues: in this manner the Sceptics and Academics doubt, who withhold their assent from every thing. See Sceptics, &c. The latter is followed by judgment, which distinguishes truth from falsehood; such is the doubting of the Peripatetics and Cartesians. The last in particular perpetually inculcate the deceitfulness of our senses, and tell us that we are to doubt of every one of their reports, till they have been examined and confirmed by reason. On the other hand the Epicureans teach, that our senses always tell truth; and that if we go ever so little from them we come within the province of doubting.

Doubting, in rhetoric, a figure wherein the orator appears some time fluctuating, and undetermined what to do or say. Tacitus furnishes us with an instance of doubting, almost to a degree of distraction, in those words of Tiberius written to the senate: Quid scribam, P. S. aut quomodo scribam, aut quid omnino non scribam hoc tempore, dii me deæque pejus perdant quam perire quotidie sentio, si scio.

DOUCET, *n. s.* Fr. *doucet*. A custard. This word I find only in Skinner and Ainsworth, says Dr. Johnson. The Archælog., vol. xv., mentions it frequently as a part of the diet of Charles I. when duke of York.

DOUCINE, in architecture, a moulding, concave above and convex below, serving commonly

as a cymatium to a delicate corniche. It is likewise called Gula.

DOUCK'ER, *n. s.* *Colymbus*; from *To douck*, corrupted from *To duck*. A bird that dips in the water.

The colymbi, or *douckers*, or loons, are admirably conformed fordiving, being covered with thick plumage, and their feathers so slippery that water cannot moisten them. *Ray.*

DOVE, *n. s.*
DOVE'COTE,
DOVE'HOUSE,
DOVE'LIKE, *adj.*
DOVE'TAILED, *adj.*

Goth. *dufa*; Sax. duu, Swed. *dufwa*; Arm. *dube*: perhaps from Heb. רב, to murmur (Parkhurst), or from Gr. δενω, to purify; for the Lat. *columba*, a dove, is formed from κολυμβις, a diver. A bird of the COLUMBA genus, which see: a dovecote and dovehouse both mean a habitation for doves.

And whanne Jhesus was baptisid, anoon he wente up fro the watir, and lo hevenes weren opened to him: and he saw the Spirit of God comynge downe as a *doowe* and comynge on him. *Wiclif. Matt.* iii.

So shews a snowy *dove* trooping with crows,
As yonder lady o'er her fellows shows.
Shakspeare. Romeo and Juliet.

Like an eagle in a *dovecot*, I
Fluttered your Volscians in Corioli;
Alone I did it. *Id. Coriolanus.*

et, Love! thou'rt blinder than thyself in this,
To vex my *dove-like* friend for my amiss,
And when one sad truth may expiate
Thy wrath, to make her fortune run my fate.
Donne.

Pamphlets are the weekly almanacks, shewing what weather is in the state, which, like the *doves* of Aleppo, carry news to every part of the kingdom.
T. Ford. 1647.

.he *dove* is sent forth, a fowl both swift and simole. She, like a true citizen of the ark, returns.
Bp. Hall. Contemplations.

Thou from the first
Wast present, and with mighty wings outspread,
Dove-like, sat'st brooding on the vast abyss,
And mad'st it pregnant. *Milton.*

The hawk sets up for protector, and makes havock in the *dovehouse*. *L'Estrange.*

When a man is made up wholly of the *dove*, without the least grain of the serpent in his composition, he becomes ridirulous in many circumstances of life, and very often discredits his best actions. *Addison.*

He made an administration so chequered and speckled; he put together a piece of joinery so crossly indented and whimsically *dove-tailed*; a cabinet so variously inlaid; such a piece of diversified mosaic; such a tesselated pavement without cement, &c.
Burke. Character of Lord Chatham.

DOVE, in geography, a river of England, in Derbyshire, which rises in the Peak, divides that county from Staffordshire, and falls into the Trent, four miles north of Burton.

DOVE-DALE, one of the most romantic spots in Derbyshire, where the Dove runs in a chasm between precipitous rocks. It is situated near Ashborn.

DOVER, a cinque-port, sea-port, and market town of Kent, is a place of considerable historical and topographical interest. Camden and others suppose it to derive its name from the British word Dwfyrrha, which signifies a steep place: the Saxons called it Dorfa, and Antoninus, in his Itinerary, Dubris. It is probable that the Roman town stood on the south side of the Dour, and that the Watling Street entered it near the old Biggen-gate.

That the ancient Britons possessed it as a military post, anterior to the Roman conquest, is also extremely probable: and that the Romans fortified and adapted it to their system of tactics is universally admitted. The old tradition, quoted and confirmed by Mr. King in his Munimenta Antiqua, vol. ii., is, that 'Arviragus, the British chief, here fortified himself, when he refused to pay the tribute imposed by Julius Cæsar; and that here, afterwards, king Arthur also held his residence.' Darrell, in his History of Dover Castle, has given currency to another tradition, which assigns the foundation of this fortress to Cæsar: and Lambard quotes Lidgate and Rosse, as saying, that 'they of the castle kept till this day certeine vessels of olde wine and salte, which they affirme to be the remayne of suche provision as he (Cæsar) brought into it.' Cæsar's own narrative, however, would lead us to no such conclusion. He speaks of being repulsed by the inhabitants of this part of Kent; and most probably landed, in his first expedition, at Deal. The Roman writers, indeed, do not affect to speak of him as having made any conquest here, but merely as having led the way into Britain:

Territa quæsitis ostendit terga Britannis.

The fortifications, and all the works we can now trace of the Romans, upon the hill, near Dover, are bounded by the deep ditch, and it will be a vain attempt to search after any military works of that people in the castle beyond it. The form of the camp, the ditch, the parapet, and the octagon building, all point out the hand of the Roman engineer and architect. It was common for them, where the ground would admit of it, to make their camp in the form of a parallelogram, with the angles rounded off, and to secure it witn a deep ditch and a high parapet: and this appears to have been the original plan of the Roman camp on this hill, before it was altered, either by the Saxons or the Normans. The former, at an early period, became masters of Dover; and, soon after their conversion to Christianity, the ancient church within the walls of the castle is said to have been consecrated by St. Augustine, at the request of king Ethelbert, whose son and successor, Eadbald, founded a college near it for secular canons. In the reign of Edward the Confessor, if not before, the great earl Goodwin was governor of the castle, and is said to have strengthened it by new fortifications. It is well known that William the Norman, when he was contriving the conquest of England, refused to permit earl Harold to depart from Rouen, until he had bound him by a solemn oath to deliver up, after Edward's death, 'the castle of Dover, with the well of water in it.'

Domesday Book informs us that, 'in the time of king Edward, Dovere paid £18, of which sum Edward had two parts, and the earl Goodwin the third part of one moiety, and the canons of St. Martin the other. The burgesses have furnished the king with twenty ships once in each year for fifteen days, and in each ship were twenty-one men; this they had done because he had freed them from sac and soc. Whoever constantly resided in the town, and paid custom to the

king, was quit of toll throughout England. All these customs were in use there when king William came into England.' For several succeeding centuries, Dover Castle was regarded as the 'key and barrier of the whole kingdom;' and, in every civil broil, the possession of this fortress was eagerly sought. Henry II., on his arrival from Normandy, rebuilt the keep, and fortified the castle, on the Norman plan, so that its strength was materially increased. Louis, the dauphin, besieged it when he landed to assist the barons, in the reign of king John; but was repulsed with great loss, by Hubert de Burgh, then governor.

In the civil wars of the seventeenth century, it was seized for the parliament, by a merchant named Drake, who, on the night of August 1st, 1642, took it by surprise, with the aid of ten or twelve men only. He contrived, by the means of ropes and scaling ladders, to lead his party to the top of the cliff on the sea-side, which, being considered as inaccessible, was left unguarded. After these commotions had subsided, this ancient pile was, for upwards of a century, left to moulder into ruins; though, in 1745, barracks had been built here sufficiently large to contain a regiment of soldiers. The wars of the French revolution, however, and the many threats of invasion then thrown out, occasioned a great alteration in the defences of this coast; and Dover Castle has been put in modern times into a respectable state of defence.

It at present consists of an immense mass of almost every kind of fortification; and is divided into two courts, a lower and an upper, defended into by deep, broad, and dry ditches, from which communications with the inner towers have been made by subterraneous passages. The buildings occupy nearly the whole summit of the eminence which bounds the south-east side of the deep valley in which Dover stands; the lower court is surrounded by an irregular wall, excepting on the side next the sea, where a considerable part of the cliff, with the remainder of the wall, was thrown down by an earthquake on the 6th of April, 1680. This wall is called the curtain, and is flanked, at unequal distances, by a variety of towers of different shapes, semi-circular, square, polygonal, &c., the workmanship of different ages. The oldest of them, which is on the eastern side of the castle, bears the name of earl Goodwin. Nine of the other towers are stated to have been built in Norman times, and to have derived their names from Sir John de Fiennes, and the eight approved warriors whom he had selected to assist in the defence of this fortress. These towers, according to their relative situation on the wall, beginning from the cliff on the western side, are: 1. The Old, or Canons' tower, which anciently had a drawbridge and battery. 2. A pentagonal tower, originally named after its first commander Albrancis, but afterwards Rokesly tower, from one of its captains. 3. Chilham, or Calderscot tower, built by Fulbert de Lucy, lord of the manor and castle of Chilham. 4. Hurst. 5. Arsic, or Sayes. 6. Gatton tower. These three were named after adjacent manors appropriated to their repairs. 7. Peveril, Beauchamp, or Marshal's tower, so successively called after William de Peveril and Hugh de Beauchamp, ancient commanders, and the marshalmen who had the superintendence of military stores, &c. 8. Port, or Porth's tower, which took its name from William de Porth, and was also called Gasting's, from one of its captains; but now bears the name of Mary's tower, from queen Mary, by whom it was re-built. 9. Fiennes tower, as it was originally named, after Sir John Fiennes, now more generally called New-gate, to distinguish it from the ancient entrance; and Constable's tower, from its having been the occasional residence of the constable or governor of the castle. 10. Clopton's tower, built by Edward IV., and deriving its name from the lord of a manor assigned for its repair. 11. Godsfoe tower, so called from an ancient commander. 12. Crevequer's, Craville's, or the earl of Norfolk's tower, a work of great magnificence, which has a subterraneous passage leading to a vault of vast extent, and strongly defended. 13. Fitz-William's, or St. John's tower, which derived its former name from Adam Fitz-William, to whom, for his valor at the battle of Hastings, the conqueror gave the scarf from his own arm, and its latter name from lord St. John, who held the lands allotted to it. 14. Averanche's, or Maunsel's tower, a fine remain of Norman workmanship, so named from Averanche, an ancient commander of this castle, and his successor Maunsel, who was lord warden of the cinque-ports in the reign of Henry III. 15. Veville, or Pincester tower, so called from two of its commanders, the latter of whom assisted Hubert De Burgh in the defence of the castle against the Dauphin. 16. Earl Goodwin's tower, built by that nobleman when governor of the castle. The upper court, like the lower one, is surrounded by a strong wall and various towers; and near the centre stands the spacious keep, erected in the beginning of Henry III.'s reign. This building is in fine preservation, and is constructed on a similar plan to those built by bishop Gundulph, and particularly to that at Rochester. It is now used as a magazine, the roof having been rendered bomb-proof. On the eastern side of this court are three towers, which derive their names from Gilbert de Maminot, or Mainmouth, who was one of the knights that accompanied the conqueror to England, and was appointed marshal of this castle by John de Fiennes: these towers command the whole vallum and ascent leading to the principal entrance to this court; near the south angle of which is another entrance, by a gate called Palace, or Subterranean Gate.

The new works recently formed for the defence of this fortress consist of different batteries, furnished with a very formidable train of artillery, casemates dug in the solid chalk-rock, magazines, covered-ways, and various subterranean communications and apartments for soldiery: the latter are sufficiently spacious for the accommodation of about 2000 men, and, with their inhabitants, form a very curious spectacle: light and air are conveyed into them by well-like apertures cut in the chalk, and by other openings in the face of the cliffs. A new road has also been made, under the direction of the Board of Ordnance, from the town to the top of the hill, where it

joins the Deal road, in a direction to be commanded by the batteries. A branch from this road turns to the right nearly opposite Gatton Tower, and enters the castle by a new bridge and gate. Near the edge of the cliff stands a piece of brass ordnance, twenty-four feet long, cast at Utrecht in 1544, and called Queen Elizabeth's Pocket Pistol.

Dover Castle occupies altogether about thirty-five acres of ground: the hill on which it stands is very steep and rugged on the side of the town and harbour; and towards the sea it is a complete precipice of upwards of 320 feet from its base on the shore. But it is commanded by higher eminences both to the north-west by west and south west. Like other royal castles, it was formerly both extra-parochial and extra-judicial; but, as several of the ancient franchises are either lost or disused, the civil power has of late years been exercised within its limits, independently of any control from the warden. At the renewal of the war, in 1803, the heights on the western side of the town were strongly fortified, agreeably to the modern system, and a new military road leading to them made. Other fortifications here are Archliff Fort, at the extremity of the pier, and Amherst Battery, at the north Pier-head: these, acting in conjunction with the heights and castle, entirely command the road to the town.

The harbour of Dover was evidently at one time considerably more inland, particularly towards the north-east. At what period the ancient haven became useless is not known, but it was a flourishing harbour in Edward the Confessor's time. A round tower was built on the south-west side of the present harbour, A.D. 1500, to protect the shipping from the violence of the south-west winds: to this tower it is said the vessels were moored by rings; and the haven was called Little Paradise. In 1533 Sir J. Thompson, then holding the living, first projected a pier at Dover, which was begun at Archcliff, on the south-west side of the bay, and carried out directly eastward into the sea, to an extent of 131 rods. The bottom was laid with vast stones, of twenty tons weight, brought from Folkstone by water. The king himself came several times to Dover to view the works, and is stated by Harris to have expended about £80,000 on this pier. Attempts were made in the two following reigns to forward the work, but no effectual advance was made till the time of Elizabeth, to whom Sir Walter Raleigh presented a memorial, stating that 'no promontory, town, or haven, in Christendom, is so placed by nature and situation, both to gratify friends and annoy enemies, as this town of Dover.' An immense quantity of beach thrown up by the sea, had formed a bar across the harbour in her reign, which totally impeded the passage. The queen therefore now granted the town the free exportation of 30,000 quarters of wheat, 10,000 quarters of barley, and 4000 tons of beer, in aid of the expense; and for the same purpose a duty of 3*d*. per ton was laid on every vessel passing this port above twenty tons burden: this duty produced about £1000 annually in 24 and 25 Eliz. Its repairs have been since provided for by several grants and acts of parliament. Agreeably to the idea of captain Perry, in his report after a survey in 1718, several jetties have been erected towards the east, to prevent the encroachments of the sea. In 1737 the mole or cross wall was faced with Portland stone, and several flood-gates or sluices were constructed in it. When the tide had receded from the mouth of the outer harbour the immense back-water, confined by these sluices, was conveyed through them, to dislodge the beach that accumulates at its entrance During a violent storm, in 1802, several rods of the north-pier head were beaten down by the fury of the waves. This was immediately rebuilt, in a most substantial manner, under the inspection of Mr. James Moon, the present harbour-master. A dry dock, and several other extensive and important works, have also been completed under the direction of this able and ingenious gentleman. The back-water, which formerly lost its force in passing through the outer harbour, is now carried round it, in cast-iron culverts or tunnels, seven feet in diameter, to the extremity of the south-pier head, where it branches off in directions, and effectually removes the beach from the entrance of the harbour, during the spring tides. These works were accomplished by Mr. Moon in 1822. The depth at spring tides is now between eighteen and twenty feet, and at neap tides about fourteen; so that ships of 400 or 500 tons may enter in safety.

The town of Dover was formerly defended by a strong embattled wall, which included a space of about half a mile square, and in which were ten gates; though not a trace of the wall or gates now remains, except of the foundation in some places. From the hills above, the town has an interesting appearance. It extends in contrary directions, to the east, south-west, and north, three long streets meeting at one point in the centre. There were formerly six parishes, each of which had its distinct church; four of these edifices have long been destroyed, with the exception of some parts of those of St. Nicholas and St. Martin-le-Grand; and the town is now divided into the two parishes of St. Mary the Virgin, and St. James the Apostle. Great part of the priory buildings still remains: a Maison Dieu, or hospital, on the left of the entrance to the town, was endowed by Hubert de Burgh, the great justiciary of England, about the beginning of the reign of Henry III.; after the dissolution, this was converted by queen Mary into an office for victualling the navy, to which use it was appropriated up to the close of the late war. In times of war, all ships in the downs, belonging to the royal navy, are supplied hence by vessels engaged for that purpose.

St. Mary's, the principal church of modern times, is a spacious and curious edifice, in length about 120 feet, in breadth fifty-five, consisting of a nave and aisles, with a tower at the west end. It is said to have been built by the priory and convent of St. Martin, in the year 1216. The west front is of Norman architecture, as are also the first three arches and their supporting columns on each side of the nave. Two years after the dissolution, this church, which had previously belonged to the Maison Dieu, was given to the parishioners by Henry VIII., who was then at

Dover; and every house-keeper, paying scot and lot, has now a right to vote in the election of a minister. The other church, St. James's, is an irregular structure, and its interior, which is kept particularly neat and clean, displays its origin to have been Norman: it has a square tower, built in arches, directly over the centre of the north aisle, and the pulpit is placed under it.

This town is governed by a mayor, twelve jurats, and thirty-six common-council-men; from the latter of whom a town-clerk and chamberlain are annually chosen. The mayor was formerly elected by the resident freemen, in St. Mary's church, on the 8th of September, the nativity of the Virgin. The two members of parliament were also chosen in St. Mary's church by the whole body of freemen, resident and non-resident, in number about 2300. But in 1826 these elections were removed by act of parliament to the town hall, or to hustings erected in the market place. Freedom is acquired by birth, servitude, marriage, and burgage tenure: the franchise obtained by marriage ceases at the death of the wife, and that by tenure at the alienation of the freehold.

Both in times of peace and war the trade of Dover is extensive; this being the principal place of embarkation for the continent. From thirty to forty vessels, exclusive of packets, are employed in the passage to the opposite shores: some are from sixty to seventy tons burden each; and have been considered as the handsomest sloops in the kingdom. They have frequently reached Calais, with a favorable wind, in three hours: the shortest passage ever known was two hours and forty minutes. Several steam vessels are now also employed in the passage to the continent, which, as well as his majesty's steam packets stationed here, well sustain the honor of the ports for elegant accommodations. In the year 1778 an act was obtained for the better paving, cleansing, lighting, and watching the town; and, in 1822, an act was passed to light it with gas, which has been very completely carried into effect: so that Dover may now be said to be, on the whole, well paved and lighted.

Dover is distant seventy-two miles from London, sixteen from Canterbury, twenty-two from Margate, and eighty-eight from Brighton. It has two weekly markets, viz. on Wednesday and Saturday; the latter being the principal. There is an annual fair, which begins on the 22d day of November, and continues three market days. The number of persons of all ranks passing through the town, is generally very great. Including the garrison of Dover Castle, and the heights, together with those districts of other parishes which form a part of the town, the population may, with much probability, be fixed at from 16,000 to 18,000. It has of late become a favorite watering place. Numerous lodging houses have been erected, and fitted up in an elegant style, for the accommodation of visitors, and many others are in progress. During the bathing season, musical promenades are established at Batcheller's King's Arms Library and Assembly Rooms, and at Warren's Marine Library. The former is an extensive and elegant structure, and was finished in 1826. No place can boast of local attractions more numerous (and which want of space alone compels us thus to pass over), or prospects more interesting. Shakspeare's beautiful description of the cliff that bears his name, on the south-west of the harbour, is well known.

Dover, a considerable township of the United States, in Stafford county, New Hampshire; incorporated in 1633. It is situated on the south side of Cochecto River, about four miles above its junction with Salmon Fall River, which together form the Piscataqua. Ten miles south by east of Rochester.

Dover, a large township of New Jersey, in Monmouth county, between Shrewsbury and New Stafford, extending from the sea to the county line.

Dover, a township of Massachusetts, in Norfolk county, incorporated in 1650. It lies fifteen miles southward of Boston.

Dover, the metropolis of Delaware state, in Kent county, on the south-west side of Jones Creek, about four miles and a half north-west from its mouth, in the Delaware; twelve miles from Duck Creek; forty-eight from Wilmington; and seventy-six S. S. W. of Philadelphia. This town has a lively appearance, and drives on a considerable trade with Philadelphia, chiefly in flour.

Dover, a small town in York county, Pennsylvania, seated on the Fox Run.

Dover, Straits of, the narrow channel between Dover and Calais, which separates Great Britain from the French coast. Britain is supposed by many to have been once peninsulated, the present straits occupying the site of the isthmus which joined it to Gaul. 'No certain cause,' says Mr. Pennant, in his Arct. Zool. Vol 1. Introd. p. ii., 'can be given for the mighty convulsion which tore us from this continent; whether it was rent by an earthquake, or whether it was worn through by the continual dashing of the waters. The correspondency of strata,' he adds, 'on part of the opposite shores of Britain and France, leaves no room to doubt but that they were once united. The chalky cliffs of Blancnez between Calais and Bologne, and those to the westward of Dover, exactly tally: the last are vast and continued; the former short, and the termination of the immense bed. Between Bologne and Folkstone (about six miles from the latter) is another memorial of the junction of the two countries; a narrow submarine hill, called the Rip-raps, about a quarter of a mile broad, and ten miles long, extending eastwards towards the Goodwin Sands. Its materials are boulder-stones, adventitious to many strata. The depth of water on it, in very low spring tides, is only fourteen feet. The fishermen from Folkstone have often touched it with a fifteen feet oar; so that it is justly the dread of navigators. Many a tall ship has perished on it, and sunk instantly into twenty-one fathoms of water. In July, 1782, the Belleisle of sixty-four guns struck, and lay on it during three hours; but, by starting her beer and water, got clear off.' These celebrated straits are only twenty-one miles wide in the narrowest part: from the pier at Dover to that of Calais twenty-four. It is said that their breadth is diminishing, and that they are two miles narrower than

they were in ancient times. An accurate observer for fifty years remarks, that the increased height of water, from a decrease of breadth, has been apparent even in that space. The depth of the channel at a medium, in the highest spring tides, is about twenty-five fathoms; the bottom either coarse sand or rugged scars, which have for ages unknown resisted the attrition of the currents. From the straits both east and west is a gradual increase of depth through the channel to 100 fathoms, till soundings are totally lost. The spring tides in the straits rise on an average twenty-four feet, the neap tides fifteen. The tide flows from the German Sea, passes the straits, and meets, with a great rippling, the western tide from the ocean, between Fairleigh near Hastings and Bologne; a proof that, if the separation of the land was effected by the seas, it must have been by the overpowering weight of those of the north.

DOUGH, *n. s.* } Goth. and Scotch *deigh;*
DOUGH'BAKED, *adj.* } Sax. dah; Welsh and
DOUGH'Y, *adj.* } Arm. *toas;* Belg. *deigh;*
from *dyghen*, to increase, because dough increases, and causes other things to increase, by fermentation.--Minsheu. Mr. Tooke insists that it is the past participle of the Sax. ᵹeapian, to moisten or wet. Unbaked bread or pastry; dough-baked, is unfinished, still dough, as in the similar phrase of Shakspeare: doughy, unsound; soft; weak.

The kyngdom of heven is lyk to sour *dowgh*, whiche a womman took and hidde in thre mesuris of mele, til it were al sowred. *Wiclif. Matt.* xiii.

My cake is *dough*, but I'll in among the rest;
Out of hope of all, but my share of the feast.
Shakspeare.

Your son was misled with a snipt taffata fellow there, whose villainous saffron would have made all the unbaked and *doughy* youth of a nation in his colour. *Id.*

For when, through tasteless flat humility,
In *doughbaked* men some harmlessness we see,
'Tis but his phlegm that's virtuous, and not he.
Donne.

Surely, if they would have been as good husbands of their cattle, as they were of their *dough*, they might have had enough to eat without need of murmuring: for if their back-burden of *dough* lasted for a month, their herds might have served them many years.
Bp. Hall. Contemplations.

When the gods moulded up the paste of man,
Some of their *dough* was left upon their hands,
For want of souls, and so they made Egyptians.
Dryden.

You that from pliant paste would fabricks raise,
Expecting thence to gain immortal praise,
Your knuckles try, and let your sinews know
Their power to knead, and give the form to *dough*.
King.

DOUGHT'Y, *adj.* Sax. ᵭohtiᵹ; Goth. *dught*, virtue. Brave; noble; eminent. Often used ironically.

Such restless passion did all night torment
The flattering courage of that fairy knight,
Devising how that *doughty* tournament
With greatest honour he achieven might.
Faerie Queene.

If this *doughty* historian hath any honour or conscience left, he ought to beg pardon. *Stillingfleet.*

She smiled to see the *doughty* hero slain;
But, at her smile, the beau revived again. *Pope.*

DOUGLAS (John), bishop of Salisbury, a native of Scotland, was born in 1721. He received his early education at Glasgow, whence he removed to Baliol College, Oxford, where he obtained a fellowship, and proceeded to the degree of master of arts, October 14th 1743. He accumulated the degrees of bachelor and doctor in divinity, May 6th, 1758. Not long after his entering into holy orders he obtained the rectory of Eaton Constantine in Shropshire, on the presentation of the earl of Bradford. In 1747 William Lauder, a native of Edinburgh, and a man of considerable talents and learning, excited general attention by publishing a paper, to which he gave the title of an Essay on Milton's Use and Imitation of the Moderns; the design of which was to prove that our great epic poet had made free with the works of some obscure Latin poets of modern date, in the composition of his immortal poem of Paradise Lost. Mr. Douglas published a detection of Lauder's forgeries in a letter to the earl of Bath, entitled, Milton Vindicated from the Charge of Plagiarism, brought against him by Mr. Lauder. In this masterly pamphlet the learned critic proves, that the passages which had been cited by Lauder from Masenius, Staphorstius, Taubmannus, and other obscure writers, had been interpolated by the forger himself, who had also foisted into his quotations entire lines from Hog's Latin translation of Paradise Lost, into which no examiner but Mr. Douglas had been inquisitive enough to look. The detection of this infamous fraud was so complete, that Lauder acknowledged it, and published a letter in which he assigned the reasons for his conduct, and his pretended contrition for the offence. Soon after the impostor published another attack on the character of Milton, charging him with having made additions to the Icon Basiliké of king Charles I. for the purpose of injuring that unfortunate monarch's reputation. This foul calumny, which was soon made manifest, rendered Lauder so infamous that he quitted the kingdom, and died some years after in the island of Barbadoes. In his next literary work Mr. Douglas detected the pretensions of Archibald Bower, the author of the Lives of the Popes, whose story is too long for this place. In 1754 our author published his principal work; entitled, Criterion, or a Discourse on Miracles; in which he settles the distinction between true and false miracles in a masterly manner. And of all the answers to the sophistry of David Hume, except that of Dr. Campbell, this may be safely pronounced the clearest and most convincing. In 1757 the author was presented to a prebendal stall in the cathedral of Durham, in which he took his degree of doctor in divinity. In 1762 he was made canon of Windsor, on the promotion of Dr. Keppel to the bishopric of Exeter. His next elevation was to the episcopal bench on the death of Dr. Edmund Law, bishop of Carlisle, in 1783. From that see bishop Douglas was translated to Salisbury, on the removal of Dr. Barrington to Durham, in 1791. Bishop Douglas was one of the first members of the celebrated beef-steak club, rendered so famous by Goldsmith's hu

morous poem, entitled Retaliation. By the appointment of the lords of the admiralty, he arranged the journals and papers of captain Cook for publication, and he prefixed to the work a most admirable and perspicuous introduction. He died in 1807, and was buried in the collegiate chapel at Windsor.

Douglas (Gavin), bishop of Dunkeld in Scotland, the third son of Archibald earl of Angus, was born in 1474. Where he was educated, is not known; but it is certain he studied theology; which did not, however, estrange him from the muses; for he employed himself at intervals in translating into beautiful verse the poem of Ovid, de Remedio Amoris. The advantages of foreign travel, and the conversation of the most learned men in France and Germany, to whom his merit procured him the readiest access, completed his education. His first preferment was to be provost of the collegiate church of St. Giles in Edinburgh; a place at that time of great dignity and revenue. In 1514 the queen regent appointed Douglas abbot of Aberbrothock, and soon after archbishop of St. Andrew's; but her power not being sufficient to establish him in that dignity, he relinquished his claim in favor of his competitor Foreman, who was supported by the pope. In 1515 he was by the queen appointed bishop of Dunkeld; and was soon after confirmed by Leo X. Nevertheless it was some time before he could obtain peaceable possession of his see. The duke of Albany, who in this year was declared regent, opposed him because he was supported by the queen; and, in order to deprive him of his bishopric, accused him of acting contrary to law in receiving bulls from Rome. On this accusation he was committed to the castle of Edinburgh, where he continued in confinement above a year; but the regent and the queen being at last reconciled, he obtained his liberty, and was consecrated bishop of Dunkeld. In 1517 he attended the duke of Albany to France; but returned soon after to Scotland. In 1521, the disputes between the earls of Arran and Angus having thrown the kingdom into violent commotion, he retired to England, where he became intimately acquainted with Polydore Virgil the historian. He died in London of the plague in 1522; and was buried in the Savoy. His most celebrated work was entitled Thirteen Bukes of Eneades, of the famous poet Virgil, translated out of Latin verses into Scottish metre, every buke having its particular prologue. Imprinted at London 1553, in 4to; and reprinted at Edinburgh 1710, in folio. He undertook it at the desire of lord Henry Sinclair, a munificent patron of arts in those times: and he completed it in eighteen months. It is said also that he compiled an historical treatise, De Rebus Scoticis.

Douglas (Sylvester Baron Glenbervie) was of a noble family in Aberdeenshire, and born May 24th, 1743. He entered as a member of one of the English inns of court, and was called to the bar, where he received a silk gown. His first political situation was that of secretary to the earl of Westmoreland, when lord-lieutenant of Ireland. In 1800 he was appointed governor of the Cape of Good Hope, but relinquished that situation the same year, and was created baron Glenbervie of Kincardine. In 1801 he was appointed joint paymaster-general of the forces; and in 1803 surveyor-general of the king's woods and forests. His lordship died at Cheltenham, May 2d, 1823. Lord Glenbervie published An Account of the Wines of Hungary, in the Philosophical Tranctions for 1773; History of the Cases of Controverted Elections, 4 vols. 8vo.; Reports of Cases determined in the Court of King's Bench, 2 vols. 8vo.; Ricciardetto, a humorous poem, translated from the Italian of Fortiguerri, with an introduction, 1822.

Douglas, a town in a parish seated on the river above Lanark, thirty-seven miles south-west of Edinburgh. Its ancient castle was burnt about forty years ago, but an elegant new seat is built on its site. Two cotton-works were erected in it, in 1791, when it contained 674 inhabitants.

Douglas, the capital of the Isle of Man. It has lately increased both in trade and buildings. The harbour, for ships of a tolerable burden, is the safest in the island, and is much mended by a fine mole that has been built on the eastern side. Population about 3000.

Douglas, a township of Massachusetts, the southernmost in Worcester county, having the state of Rhode Island on the south, and that of Connecticut on the south-west. It is very rocky, and lies sixteen miles south of Worcester, and forty-seven south-west of Boston. It was incorporated in 1746, and named in honor of William Douglas, M. D. of Boston, a native of Scotland, and a considerable benefactor to the town.

Douglas, Cape, a promontory on the north-west coast of North America, which forms the west side of the entrance into Cook's River, opposite Point Bode, which forms the east side. It is a very lofty promontory, and its elevated summit appears above the clouds, forming two exceedingly high mountains. Long. 206° 10′ E., lat. 58° 56′ N.

Douglas Island, an island between Admiralty Island and the west coast of America. It is about twenty miles long, and six miles broad in the middle; but becomes narrow towards each end; eastward it terminates in a sharp point. The channel between this island and the mainland is generally choked up with ice.

DOULEIA, *δουλεια*, in antiquity, a punishment among the Athenians, by which the criminal was reduced to the condition of a slave. It was never inflicted upon any but the *ατιμοι*, sojourners and freed servants.

DOVRAFIELD, the highest range of mountains in the Scandinavian peninsula, which, with another chain, divides the kingdom of Norway into north and south. Its highest peak is upwards of 8000 feet above the level of the sea. It derives its name from the village of Dovre.

DOURO, or Duero, a river of Spain, which rising on the borders of Arragon, and flowing westward, traverses more than half the width of the peninsula. It receives a number of streams from the mountains of Biscay and Leon to the north, and from those of Old Castile to the south. In part of its course, it forms the boun-

dary between Spain and the province of Tras los Montes in Portugal. In the lower part of its course it runs wholly in Portugal, and forms a line of separation between Beira and the northern provinces. It finally discharges itself into the Atlantic, a little below Oporto. The banks of this river were the scene of various movements of the English and French armies in 1812 and 1813, previous to the battles of Salamanca and Vittoria.

To DOUSE, *v. a.* & *v. n.* Gr. δύσις; but probably it is a cant word formed from the sound. To put over head suddenly in the water. To fall suddenly into the water.

It is no jesting trivial matter,
To swing in the' air, or *douse* in water.
Hudibras.

DOUW (Gerhard), a celebrated painter, born at Leyden in 1613. At the age of fifteen he became a disciple of Rembrandt, and continued with him three years. From Rembrandt he learned the true principles of coloring, and obtained a complete knowledge of the chiaroscuro; but to that knowledge he added a delicacy of pencil, and a patience in working up his colors to the highest degree of neatness, superior to any other master. His pictures are usually of a small size, with figures so exquisitely touched, so transparent, so wonderfully delicate, as to excite astonishment as well as pleasure. He designed every object after nature, and with an exactness so singular, that each figure separately appears perfect in respect to color, freshness, and force. Of his patience Sandrart gives a remarkable instance. Having once, in company with Bamboccio, visited Douw, they took particular notice of a broom he was then painting, and, expressing their surprise at the excessive neatness of that minute object, Douw told them he should spend three days more on that broom, before he should account it complete. In a family picture of Mrs. Spiering, the same author informs us, that the lady sat five days for the finishing one of her hands that leaned on an arm-chair. Few, therefore, would sit to him for their portraits; so that he indulged himself mostly in works of fancy, on which he could employ as much time as suited his inclination. Douw died in 1674, aged sixty-one. He is doubtless the most wonderful in his finishing of all the Flemish masters. His pictures are also remarkable, not only for retaining their original lustre, but for having the same beautiful effect at any distance. In the gallery at Florence there is a night-piece by candle-light, which is exquisitely finished; and, in the same apartment, a mountebank attended by a number of figures, which it seems impossible either sufficiently to commend or to describe.

DOW'AGER, *n. s.* Fr. *douairiere*. A widow with a jointure. A title also given generally to widows of rank.

She lingers my desires,
Like to a stepdame or a *dowager*,
Long wintering on a young man's revenue.
Shakspeare.

Catharine no more
Shall be called queen; but princess *dowager*,
And widow to prince Arthur. *Id. Henry VIII.*

Widows have a greater interest in property than either maids or wives; so that it is as unnatural for a *dowager* as a freeholder to be an enemy to our constitution. *Addison.*

DOW'DY, *n. s.* & *adj.* From *dowd*, or *deyhood*; *dey* a nurse, and *hood* a cap. An awkward ill-dressed woman: slatternly.

Laura, to his lady, was but a kitchen wench; Dido, a *dowdy*; Cleopatra, a gipsy; Helen and Hero, slidings and harlots. *Shakspeare. Romeo and Juliet.*

The bedlam train of lovers use
T' inhance the value, and the faults excuse;
And therefore 'tis no wonder if we see
They doat on *dowdies* and deformity. *Dryden.*

No housewifery the *dowdy* creature knew;
To sum up all, her tongue confessed the shrew.
Gay.

Let *dowdies* simper, and let bumpkins stare,
The strolling pageant hero treads in air.
Churchill.

DOW'ER, *n. s.* DOW'RY, DOW'ERED, *adj.* DOW'ERLESS. Fr. *douaire*, from Lat. *donare*, expletive of *do*, *dare*, to give. The portion given with a wife, or for a wife; the settlement on a widow; hence endowment: generally; gift.

Ask me never so much *dowery* and gift, and I will give according as you shall say unto me; but give me the damsel to wife. *Gen.* xxxiv. 12.

Returne from whence ye came, and rest awhile,
Till morrow next, that I the elfe subdew,
And with Sansfoyes dead *dowry* you endew.
Spenser. Faerie Queene.

And ask no other *dowry* but such another jest.
Shakspeare.

Will you with those infirmities she owes,
Unfriended, new adapted to our hate,
Dowered with our curse, and strangered with our oath,
Take her, or leave her? *Id. King Lear.*

Thy *dowerless* daughter, king, thrown to my chance,
Is queen of us, and ours, and our fair France. *Id.*

His patrimonial territories of Flanders were in *dower* to his mother-in-law. *Bacon's Henry VII.*

Our first mother Eve bequeathed this *dowry* to her daughters, that they should be our helpers to sin.
Bp. Hall. Contemplations.

What spreading virtue, what a sparkling fire,
How great, how plentiful, how rich a *dower*,
Dost thou within this dying flesh inspire! *Davies.*

Thine own hand
An hundred of the faithless foe shall slay,
And for a *dowre* a hundred foreskins pay.
Cowley.

I could marry this wench for this *dowre*. *Sidney.*

His wife brought in *dower* Cilicia's crown.
And in herself a greater *dower* alone. *Dryden.*

The king must die, that I may make you great,
And give a crown in *dowry* with my love.
Id. Spanish Friar

His only daughter in a stranger's power;
For very want, he could not pay a *dower*? *Pope.*

Rich, though deprived of all her little store,
For who can seize fair virtue's better *dower*?
Melmouth.

Yes, when he shines in gold
Girl, you but grasp your *dowry*. *Byron.*

DOWER, DOTARIUM, DOARIUM, or Dos, is the estate, for life, which a widow acquires in a certain portion of her husband's real property, after his death, for the maintenance of herself and the education of her children.

The custom of dower is derived from the Germans, amongst whom it was a rule, that a woman should have no marriage portion, but that the husband should allot a part of his property for her use, in case she survived him. Thus Tacitus, in his treatise, De Moribus Germanorum, sect. 18, says, 'Dotem non uxor marito, sed uxori maritus offert.' The Saxons, also, were acquainted with it, as appears from the laws of King Edmond; by which a widow was entitled to a moiety of her husband's property for her life. And no alteration seems to have been made in this custom at the conquest, nor indeed until the reign of Henry II.; when, according to Glanville, every man was bound, both by the civil and ecclesiastical law, to endow his wife, at the time of marriage, either of all his lands, generally, or of some particular part thereof: if endowed generally, the wife was entitled to her dos rationabilis, which was one third part of her husband's freehold; if specially, to the particular land named, provided it did not amount to more than a third. Similar regulations with respect to dower are contained in the Grand Coutumier of Normandy.

The following are the five different kinds of dower which once existed, but the first two only are now in use. 1. *Dower by the common law.* This entitles the widow, after the death of her husband, to the enjoyment, during her life, of a third part of all the lands and tenements of which he was seized in fee simple or fee tail at any time during the coverture. This right is not prejudiced by the husband's conveyance of such lands, even though the wife join therein (unless a fine or recovery be used, as stated subsequently in this article), nor by his disposing of the same by will. 2. *Dower by custom* is where a widow becomes entitled to a certain portion of her husband's lands in consequence of some local and peculiar custom. Thus, by the custom of gavelkind (a tenure by which a great part of the land in Kent is still held), she is entitled to a moiety of the lands held by her husband in that tenure: and by the custom of some boroughs she is entitled to all the tenements that were her husband's. Copyhold lands are not at common law subject to dower; but, by the custom of most manors, the widows of copyholders are entitled to a certain part, and sometimes to the whole, of the copyhold lands of which their husbands die possessed. This kind of dower is generally called the widow's free bench.

The species of dower now out of use are, 3. *Dower ad ostium ecclesiæ*, which was where the husband, at the church door, after the marriage, endowed his wife with the whole or a certain portion of his lands. 4. *Dower ex assensu patris*, in which species the husband being heir apparent of his father, with his consent, endowed the wife, at the church door, with a part of the lands of the father. And, 5. *Dower de la pluis beale.* This was merely a consequence of tenures by knight-service, and was abolished by the statute of 12 Car. II., when those tenures were converted into socage.

As to the persons entitled to dower.—Alien women are not generally capable of acquiring dower: an alien queen is, however, an exception to this rule; and, by an act passed in the reign of Henry V. (not printed among the statutes but contained in Rot. Parl. vol. iv. 128-130), all alien women, who from thenceforth should be married to Englishmen, by license from the king, are enabled to have their dower. Naturalisation also removes this disability; as does also denization, so far as relates to the lands of which the husband was seized when his alien wife was created a denizen, but not to any of which he was seized before, and which he had then parted with. Jewesses also, as long as they continue of that religion, cannot be endowed. With the above exceptions every woman, who has attained the age of nine years, is by the common law entitled to dower; but she may be deprived thereof in the several ways following. 1. By the attainder of the husband for treason; but not for misprision of treason or felony. 2. By the attainder of herself for treason or felony, unless afterwards pardoned, in which case her capacity to be endowed is restored as fully as if it had never been lost. 3. By divorce *à vinculo matrimonii*: it must be observed that a divorce, *à mensâ et thoro* will not deprive the wife of dower, such divorce being merely a permission to the parties to live separate, and not a dissolution of the marriage. 4. By elopement from the husband, and living with an adulterer: but if the former be afterwards voluntarily reconciled, and suffer his wife to dwell with him, the incapacity will be removed. 5. By withholding the title-deeds of the property from the heir at law. 6. By joining with the husband in levying a fine or suffering a common recovery of his lands: but this will only prevent her from claiming dower out of the lands comprized in the fine or recovery. Also, by the custom of London, a married woman may bar herself of dower by a bargain and sale acknowledged before the lord mayor, or the recorder, and one alderman, and enrolled in the court of hustings: in this case the wife must be examined separately from her husband as to her consent. 7. The last and most usual mode, now in practice, of barring dower, is a jointure settled on the wife before marriage. See JOINTURE.

DOW'LAS, *n.s.* A coarse kind of linen

Dowlas, filthy *dowlas*; I have given them away to bakers' wives, and they have made boulters of them. *Shakspeare.*

DOWLAS HEAD, a cape of Ireland, on the coast of Kerry, in Munster. Near this are several large caves, one of which has its entrance so low as hardly to admit of a boat with a man standing up in it; but, further in, the roof is as high as that of a Gothic cathedral, and has a fine echo.

DOWLETABAD, a district of Hindostan, in the nizam's dominions, in the province of Aurungabad, situated between the nineteenth and twentieth degrees of north latitude, and extending along the north side of the Godavery.

DOWLETABAD, DEOGHIR, or DEOGHUR, a town and strong fortress in the province of Aurungabad, deemed by the natives impregnable. It stands on the summit of a mountain, surrounded with other enclosures, of which that on the plain contains a large town. The two lower forts are overtopped by the upper, and com-

manded by it. In 1595 Dowletabad surrendered to Ahmed Nizam Shah, of Ahmednuggur, and on the fall of his dynasty it was taken possession of by Mallek Amber, an Abyssinian slave, who was reckoned one of the ablest generals and financiers of his age. His successors reigned until 1634, when it was taken by the Moguls during the reign of Shah Jehan, and the capital transferred to the neighbouring town of Gurka, or Kerkhi, since named AURUNGABAD, which see.

DOWN, *n. s.* } Bel. *dons;* Swed. *dun;*
DOWN'ED, *adj.* } Dan. *duun.* The softest part
DOWN'Y, *adj.* } of a bird's plumage; hence applied to the soft fibres of plants, and any thing remarkably soft or soothing.

By his gates of breath
There lies a *downy* feather, which stirs not:
Did he suspire, that light and weightless down,
Perforce must move. *Shakspeare.*

Banquo! Donalbain! Malcolm! awake!
Shake off this *downy* sleep, death's counterfeit,
And look on death itself. *Id. Macbeth.*

There be plants that have prickles, yet have a *downy* or velvet rind upon their leaves, as stock-gillyflowers and coltsfoot; which down or nap consisteth of a subtile spirit, in a soft substance.
Bacon's Natural History.

Like scattered *down*, by howling Eurus blown,
By rapid whirlwinds from his mansion thrown.
Sandys.

Give me flattery,
Flattery the food of courts, that I may rock him,
And lull him in the *down* of his desires. *Beaumont.*

Virtue is the roughest way,
But proves at night a bed of *down*. *Wotton.*

Leave, leave, fair bride! your solitary bed,
No more shall you return to it alone;
It nurseth sadness: and your body's print,
Like to a grave, the yielding *down* doth dint.
Donne.

We tumble on our *down*, and court the blessing
Of a short minute's slumber. *Derham's Sophy.*

In her hand she held
A bough of fairest fruit, that *downy* smiled,
New gathered, and ambrosial smell diffused.
Milton.

A side breeze from westward waits their sails to fill,
And rests in those high beds his *downy* wings.
Dryden.

I love my husband still;
But love him as he was when youthful grace,
And the first *down* began to shade his face. *Id.*

A tender weakly constitution is very much owing to the use of *down* beds. *Locke.*

Thou bosom softness, *down* of all my cares!
I could recline my thoughts upon this breast
To a forgetfulness of all my griefs,
And yet be happy. *Southern's Oroonoko.*

On thy chin the springing beard began
To spread a doubtful *down*, and promise man.
Prior.

What pain to quit the world, just made their own,
Their nest so deeply *downed*, and built so high!
Too low they build who build beneath the stars.
Young.

Belinda still her *downy* pillow prest,
Her guardian sylph prolonged the balmy rest.
Pope.

How much do they mistake, how little know
Of kings and kingdoms, and the pains which flow
From royalty, who fancy that a crown,
Because it glistens, must be lined with *down*.
Churchill.

How long shall sloth usurp thy useless hours,
Unnerve thy vigour, and enchain thy powers;
While artful shades thy *downy* couch inclose,
And soft solicitation courts repose?
Dr. Johnson's Poems.

For the preservation of the immature seed nature has used many ingenious methods; some are wrapped in *down*, as the seeds of the rose, bean, and cotton-plant; others are suspended in a large air-vessel, as those of the bladder-sena, staphylæa, and pea.
Darwin.

DOWN, *v. a., v. n., n. s., adj. adv. prep.* & *interj.* } Saxon dun; Erse, *dunc;* a-
DOWN'CAST, *adj.* } hill. The sub-
DOWN'FALL, *n. s.* } stantive has
DOWN'FALLEN, *adj.* } here originated
DOWN'GYVED, *adj.* } the other uses
DOWN'HILL, *n. s.* & *adj.* } of the word,
DOWN'LOOKED, *adj.* } and still retains
DOWN'LYING, *n. s.* } in Sussex, and
DOWN'RIGHT, *adj.* & *adv.* } in some other
DOWN'SITTING, *n. s.* } parts of Eng-
DOWN'TRODDEN, *part. adj.* } land, its primi-
DOWN'WARD, *adj.* & *adv.* } tive meaning.
DOWN'WARDS, *adv.* } To down is used by Sidney for to subdue; beat downwards. As a neuter verb it signifies, to descend; be received. As an adjective, dejected; and sometimes firm; positive (figuratively). As a preposition, it means along or towards a lower point. As an adverb, on or tending to the ground; below the horizon, answering and opposed to up; also from former to later times, and from higher to lower station or repute. As an interjection, it encourages to, or pronounces, degradation or destruction. Downcast is, bent towards the ground. Downfal, ruin; calamity. Downgyved, hanging down like fetters. Downright is, plain; open; or, as we say, by a similar figure, straightforward; direct; unqualified. The meaning of the other compounds is apparent.

And now the axe is put to the roote of the tree, therfor every tre that makith not good fruyt schal be kit *down* and schal be cast into the fyr.
Wiclif. Matt. 3.

Let them wander up and *down* for meat, and grudge if they be not satisfied. *Psalm* lix. 15.

Thou knowest my *downsitting* and mine uprising; thou understandest my thoughts afar off.
Id. cxxxix. 2.

Then thought the prince all peril sure was past,
And that he victor onely did remayne,
No sooner thought, then that the carle as fast
Gan heap huge strokes on him, as ere he *down* was cast. *Spenser.*

How goes the night, boy?
—The moon is *down;* I have not heard the clock,
And she goes *down* at twelve. *Shakspeare. Macbeth.*

Down, down to hell, and say I sent thee thither.
Shakspeare.

Go, some pull *down* the Savoy; others to the inns of courts: *down* with them all. *Id.*

Why dost thou say king Richard is deposed;
Darest thou, thou little better thing than earth,
Divine his *downfal?* *Id. Richard II.*

Lord Hamlet, with his stockings loose,
Ungartered and *downgyved* to his ancles.
Shakspeare.

Elves away!
We shall chide *downright* if I longer stay. *Id.*

A ring the count does wear,
That *downward* hath succeeded in his house,
From son to son, some four or five descents. *Id.*

Mahomet puts his chief substance into certain boats, to be conveyed *down* the river, as purposing to fly. *Knolles.*

An admonition from a dead author, or a caveat from an impartial pen, will prevail more than a *downright* advice, which may be mistaken as spoken magisterially. *Bacon.*

I would rather have a plain *downright* wisdom, than a foolish and affected eloquence. *Ben Jonson's Discoveries.*

Lord of much riches, which the use renowns:
Seven thousand broad-tailed sheep grazed on his *downs*. *Sandys.*

The idolatry was direct and *downright* in the people, whose credulity is illimitable. *Browne's Vulgar Errours.*

No bread will *down* with them, save that which the earth yields; no water but from the natural wells or rivers. *Bp. Hall. Contemplations.*

To come from all things to nothing, is not a descen' but a *downfall*; and it is a rare strength and constancy, not to be maimed at least. *Id.*

We can naturally like no view of ourselves, unless we look *downwards*, to teach us what humble admirers we ought to be of our own value. *Butler.*

He shared our dividend o' the crown,
We had so painfully preached *down*;
And forced us, though against the grain,
To' have calls to preach it up again. *Hudibras.*

A giant's slain in fight,
Or mowed o'erthwart, or cleft *downright*. *Id.*

Whom they hit, none on their feet might stand,
Though standing else as rocks: but *down* they fell
By thousands. *Milton's Paradise Lost.*

But first I mean
To exercise him in the wilderness,
There he shall first lay *down* the rudiments
Of his great warfare. *Milton.*

Not all the fleecy wealth
That doth enrich those *downs* is worth a thought,
To this my errand, and the care it brought. *Id.*

Look *downward* on that globe, whose hither side,
With light from hence, shines. *Id.*

It is *downright* madness to strike where we have no power to hurt. *L'Estrange.*

Down sinks the giant with a thundering sound,
His pond'rous limbs oppress the trembling ground. *Dryden.*

But now they cry, *down* with the palace, fire it,
Pull out the' usurping queen. *Id.*

My wily nurse by long experience found,
And first discovered to my soul its wound;
'Tis love, said she; and then my *downcast* eyes,
And guilty dumbness witnessed my surprize. *Id.*

Heavy the third, and stiff, he sinks apace;
And though 'tis *downhill* all, but creeps along the race. *Id.*

Jealousy, suffused with jaundice in her eyes,
Discolouring all she viewed, in tawny dressed;
Downlooked, and with a cuckoo on her fist. *Id.*

When Aurora leaves our northern sphere,
She lights the *downward* heaven, and rises there. *Id.*

A *downright* scholar is one that has much learning in the ore, unwrought and untried, which time and experience fashions and refines. *Bp. Earle.*

It has been still preached up, but acted *down*; and dealt with as the eagle in the fable did with the oyster, carrying it up on high, that by letting it fall, he might dash it in pieces. *South.*

We have seen some, by the ways by which they had designed to rise uncontrollably, to have directly procured their utter *downfall*. *Id.*

The hidden beauties seemed in wait to lie,
To *down* proud hearts that would not willing die. *Sidney.*

On the *downs* we see, near Wilton fair,
A hastened hare from greedy greyhound go. *Id.*

Wanton languishing borrowed of her eyes, the *downcast* look of modesty. *Id.*

A man falling *down* a precipice, though in motion, is not at liberty, because he cannot stop that motion if he would. *Locke.*

If he be hungry more than wanton, bread alone will *down*; and if he be not hungry, 'tis not fit he should eat. *Id.*

Hills are ornamental to the earth, affording pleasant prospects to them that look *downwards* from them upon the subjacent countries. *Ray on the Creation.*

Hills afford pleasant prospects; as they must needs acknowledge who have been on the *downs* of Sussex. *Id.*

There are few, very few, authors, that will own themselves in a mistake, though all the world see them to be in *downright* nonsense. *Tatler.*

There is not a more melancholy object in the learned world, than a man who has written himself *down*. *Addison.*

Thy *downcast* looks, and thy disordered thoughts,
Tell me my fate: I ask not the success
My cause has found. *Id. Cato.*

It is then (in old age) we have nothing to manage, as the phrase is; we speak the *downright* truth, and whether the rest of the world will give us the privilege or not, we have so little to ask of them, that we can take it. *Steele.*

What remains of the subject, after the decoction, is continued to be boiled *down*, with the addition of fresh water, to a sapid fat. *Arbuthnot on Aliments.*

And the first steps a *downhill* greensward yields. *Congreve.*

As you lift up the glasses, the drop will ascend slower and slower, and at length rest, being carried *downward* by its weight as much as upwards by the attraction. *Newton.*

O happy plains, remote from war's alarms,
And all the ravages of hostile arms!
And happy shepherds! who, secure from fear,
On open *downs* preserve your fleecy care. *Gay.*

To compass this, his building is a town,
His pond an ocean, his parterre a *down*. *Pope.*

What would this man? Now upward will he soar,
And, little less than angel, would be more;
Now looking *downwards*, just as grieved appears
To want the strength of bulls, the fur of bears. *Id.*

Religion seems not in danger from *downright* atheism, since rational men must reject that for want of proof. *Rogers.*

Who shall dispute what the reviewers say?
Their word 's sufficient; and to ask a reason,
In such a state as theirs, is *downright* treason. *Churchill.*

This structure in some degree obtains in the esophagus or throat of cows, who by similar means convey their food first *downwards* and afterwards upwards by a retrograde motion of the annular muscles or cartilages, for the purpose of a second mastication of it. *Darwin.*

A more unsafe and uncertain rule could hardly be laid *down*, than this of estimating property according to its value at some remoter period of our history. *Sir S. Romilly.*

Gazing on his Trojan bride,
With some remorse within for Hector slain
And Priam weeping, mingled with deep passion
For the sweet *downcast* virgin, whose young hand
Trembled in his who slew her brother. *Byron.*

Around her form a thin robe twining,
Nought concealed her bosom shining;
Through the parting of her hair,
Floating darkly *downward* there,
Her rounded arm showed white and bare.
Id. Siege of Corinth.

Down, in commerce, the fine feathers from the breasts of several birds, particularly of the duck kind. That of the eider duck, see Anas, is the most valuable. These birds pluck it from their breasts, and line their nests with it. We are told that the quantity of down found in one nest more than filled the crown of a hat, yet weighed no more than three quarters of an ounce. Three pounds of this down may be compressed into a space scarcely bigger than one's fist; yet is afterwards so dilatable as to fill a quilt five feet square. That found in the nests is most valued, and termed live down; it is infinitely more elastic than that plucked from the dead bird, which is little esteemed.

Down, a county in the north of Ireland, containing a bishopric of the same name, founded in the fifth century: it contains eight baronies, and one lordship, is fifty miles in length, by forty in breadth, having a surface of 364,118 plantation acres. Down is thickly inhabited by resident gentry, and is extensively engaged in the manufacture of linen. The towns of this county are some of the most comfortable and elegant in Ireland. The surface is rather hilly: the prevailing rock, slate; the soil clay loam, and occasionally sand. A group of lofty granite mountains in the south occupies an area of about ninety square miles, between Newry and Dundrum Bay: in these mountains beryls, not unlike emeralds, are frequently found, and sold in London at high prices. The Sliebh Croob group, in the centre of the county, is also a granitic region. Sand-stone is also met with, but limestone scarcely at all. If we except the above mentioned districts, this county may be said to be wholly under tillage or pasture. The chief towns are Bangor, Donaghadee, Hillsboro' (the residence of the marquis of Downshire), Rostrevor, a picturesque bathing village, Bannbridge, Downpatrick, the assizes town; and Newry, a handsome flourishing town, in the lordship of that name. There are several valuable fishing stations on the sea-coast of this county, from Bangor to Carlingford. Dundrum Bay affords good trawling-ground: Strangford Lough has hitherto been avoided, from a supposed intricacy of navigation, and from being represented as a bar-harbour; but it has been shown by Mr. Ninno that Strangford Lough is the safest harbour on the coast, at the same time that he has detected the existence of a rock in the entrance, called the Buller Pladdy, hitherto unknown. Carlingford harbour is obstructed by two bars, Cranfield and Stalken: this harbour requires a new chart. A pier has lately been erected at Ardglass, at the public expense, and another at Killough, by the proprietor, lord Bangor.

Granite is found in two great districts of Down, the Mourne and Sliebh Croob groups. Slate is also abundant, and it is probable that, at their junction, valuable mines will yet be discovered. Lead mines have been opened near Newton-Ardes, Portaferry, and Castlewellan, but not yet worked to any extent. Copper is found at Rostrevor, Portaferry, and Clonligg. Slate, of superior quality, is raised at Ballywalter and Doomarah: limestone at Cultra and Moira; and several quarries of blackish marble are successfully worked in this last-mentioned district. Pearls, of some value, are often found in the rivers Bann and Lagan. This county is rich in remains of antiquity; here are stone altars and cromliachs; the giant's ring; raths and mounds of singular formation: round towers stood at Drumboe and Downpatrick, and many beautiful ecclesiastical buildings, though now almost ruined, bear testimony to the ancient learning and piety of this county; the remains of thirty-six are still discoverable. Amongst the natural curiosities, the chief are the caves of Ardglass and Ballycam. Many military antiquities also exist here: several of the finest castles were erected, during the civil wars, by colonel Monck.

DOWNHAM, a town of Norfolk, ten miles south of Lynn, famous for its butter; there being nearly 1000 firkins bought here every Monday, and sent up the river Ouse to Cambridge; from whence it is conveyed to London in the Cambridge waggons, and hence called Cambridge butter. The church is a neat building, situate on a rising ground; the ascent to it on the north-west is by a flight of brick steps, and on the south by a gradual ascent, ornamented with a row of lime-trees. In the vicinity of this church were formerly several religious foundations, particularly a priory of Benedictine monks. Downham has a market on Saturday, and is seated on the Ouse; thirty-five miles north-east of Cambridge, and eighty-four north by east of London. Long. 0° 20′ E., lat. 54° 40′ N.

DOWNINGS, a post town of Pennsylvania, in Chester county, on the east side of Brandywine Creek; thirty-three miles west by north of Philadelphia, and nearly seven north-west of Westchester.

DOWNPATRICK, the assizes town of the county of Down, in Ireland: it is ninety-two miles from Dublin, is a borough, post, and fair town. Here St. Patrick is said to have been interred, along with St. Bridget and St. Columb. There are several monastic ruins in the vicinity, also St. Patrick's well, still supposed to possess very singular healing virtues, and used as Holy-well, in Flintshire, both for partial and total immersion. This town has a handsome court-house; a capacious jail, lately erected; a diocesan school; an establishment for the support of clergymen's widows; Southwell's hospital; a poor school; and meeting-houses for Presbyterians and Methodists. The staple is linen.

DOWNS, a celebrated road for ships, extending six miles along the east coast of Kent, between North and South Foreland; where both the outward and homeward-bound ships frequently make some stay; and squadrons of men

of war rendezvous in time of war. It affords excellent anchorage; and is defended by the castles of Deal, Dover, and Sandwich, as well as by Goodwin Sands.

DOWNTON, or DUNKTON, an ancient borough in Wiltshire, which sends two members to parliament. The returning officer is the deputy-steward of the lessee of the manor; and the right of election is in burgage-holders. Its chief trade is in malt, paper, leather, laces, &c. It has a neat church, the tower of which has been raised about thirty feet, at the expense of the earl of Radnor. Here is a good free-school, chiefly supported by the produce of the fairs, and also a well-regulated workhouse. It is seated on the Avon, six miles south-east of Salisbury, and eighty-four W.S.W. of London. Lon. 1° 36′ W., lat. 51° 0′ N.

DOXOL'OGY, *n. s.* Δόξά and λόγος. A form of giving glory to God.

David breaks forth into these triumphant praises and *doxologies*, Blessed be the Lord God of Israel, who has kept me this day from shedding blood, and from avenging myself with my own hand. *South.*

Little did Athanasius imagine, that ever it would have been received in the Christian church, to conclude their books with a *doxology* to God and the blessed virgin. *Stillingfleet.*

DOXOLOGY, an hymn used in praise of the Almighty, distinguished by the title of greater and lesser. Both the doxologies have a place in the church of England, the former being repeated after every psalm, and the latter used in the communion service.

DOXOLOGY, THE GREATER, or the angelic hymn, was of great note in the ancient church. It began with these words, which the angels sung at our Saviour's birth, Glory be to God on high, &c. It was chiefly used in the communion service, and in private devotions.

DOXOLOGY, THE LESSER, was anciently only a single sentence, without response, running in these words, Glory be to the Father, and to the Son, and to the Holy Ghost, world without end, Amen. Part of the latter clause, As it was in the beginning, is now, and ever shall be, was inserted some time after the first composition. Some read this ancient hymn, Glory be to the Father, and to the Son, with the Holy Ghost: others, Glory be to the Father, in or by the Son, and by the Holy Ghost. This difference of expression occasioned no disputes in the church, till the followers of Arius began to make use of the latter as a distinguishing character of their party, when it was entirely laid aside by the Catholics, and the use of it was sufficient to bring any one under suspicion of heterodoxy. The doxology was used at the close of every solemn office. The western church repeated it at the end of every psalm. Many of their prayers were also concluded with it, particularly the solemn thanksgiving or consecration prayer at the eucharist. It was also the ordinary conclusion of their sermons.

DOX'Y, *n. s.* A whore; a loose wench. A diminutive of DUCK, which see.

When daffodils begin to pure,
With heigh! the *doxy* o'er the dale.
Shakspeare.

DOYEN (François), a celebrated painter, born at Paris in 1726, was, while a boy, continually disfiguring his school-books with sketches. Some of these being seen by an amateur, he persuaded the parents of the lad to place him under C. Vanloo, and at twenty years of age he contended for the prize of the academy and gained it. By virtue of this he went to Rome, where he attached himself principally to the works of Annibal Caracci, but became equally enamoured, afterwards, of the style of Pietro da Cortona. On his return to Paris he employed himself two years on a large picture of the death of Virginia. His principal object was to gain the approbation of Vanloo. But that artist had been prejudiced against him, and it was with difficulty he could be prevailed upon to look at it. At last, after regarding it silently for some time, he embraced Doyen affectionately, and applauded the performance every where. From this time Doyen rose rapidly into fame. One of his best paintings was a representation of winter, of which there is an engraving. He visited Petersburgh at the invitation of the Empress Catharine, and was chosen professor of the academy of painting there, where he died in 1806.

DOZE, *v. n.* & *v. a.* } Sax. dræs; Dutch
DOZ'INESS, *n. s.* } *daes*; Teut. *dosen*;
DO'ZY, *adj.* } Swed. *dasa*. See DAZE.

To slumber; sleep lightly; become confused or drowzy. The active verb signifying to stupify, make dull, seems derived from the neuter verb: doziness is sleepiness; and figuratively stupidly; dozy, drowsy.

He was now much decayed in his parts, and with immoderate drinking *dozed* in his understanding. *Clarendon.*

There was no sleeping under his roof; if he happened to *doze* a little, the jolly cobler waked him. *L'Estrange.*

It has happened to young men of the greatest wit to waste their spirits with anxiety and pain, so far as to *doze* upon their work with too much eagerness of doing well. *Dryden.*

The yawning youth, scarce half awake, essays
His lazy limbs and *dozy* head to raise. *Id.*

A man, by a violent fit of the gout in his limbs, finds a *doziness* in his head, or a want of appetite. *Locke.*

How to the banks, where bards departed *doze*,
They led him soft. *Pope's Dunciad.*

DOZ'EN, *n. s.* Fr. *dousaine*; Teut. *dutzend*; Ital. Span. and Port. *dozzena*; probably a corruption of Lat. *duodecim*. Twelve, taken collectively. Dr. Johnson says, it is seldom used but on light occasions. But see the definition of Locke: its convenience in fact has occasioned it to be in constant use in modern times, both on serious as well as light occasions.

We cannot lodge and board a *dozen* or fourteen gentlewomen, but we keep a bawdyhouse straight. *Shakspeare.*

That the Indian figs bear such huge leaves, or delicate fruit, I could never find; yet I have travelled a *dozen* miles together under them. *Raleigh.*

We have more words than notions, and half a *dozen* words for the same thing. Sometimes we put a new signification to an old word, as when we call a piece a gun. *Selden.*

By putting twelve units together, we have the complex idea of a *dozen*. *Locke.*

The number of dissenters was something under a *dozen* with them. *Swift.*

DRAAIYA, or Drehyeh, a well-built town of Arabia, the capital of the Wahabees sect. It is represented as 160 leagues south-east of Jerusalem. It is situated at the base of lofty mountains, in a fertile country.

DRAB, *n. s.* Sax. ᵹnabbe, lees. A whore; a strumpet.

If your worship will take order for the *drabs* and the knaves, you need not fear the bawds. *Shakspeare.*

Cursed be the wretch so venal and so vain,
Paltry and proud as *drabs* in Drury-lane. *Pope.*

DRABA, in botany, a genus of the siliculosa order, tetradynamia class of plants; natural order thirty-ninth, siliquosæ. The silicula is entire, and oval oblong; with the valves a little plain, parallel to the partition: there is no style. There are sixteen species; of which the one chiefly worthy of notice is the D. verna, or early whitlow grass. It has naked stalks with leaves a little serrated. The blossoms are white, and at night the flowers hang down. It grows on old walls and dry banks. It is one of the earliest flowering plants we have, and is good to eat as a salad. Goats, sheep, and horses eat it: cows are not fond of it; swine refuse it.

DRABRICIUS (Nicholas), a celebrated enthusiast, born in Moravia in 1587. He was admitted minister in 1616; but, on account of the severe edicts against the Protestants, he retired to Hungary in 1629. He then commenced woollen-draper; and, when about fifty years of age, assumed the prophetical office, and had his first vision on the 23d February, 1638, by which he was promised in general great armies from the north and east, which should crush the house of Austria. In 1654 Drabricius was restored to his ministry, and had more visions than ever, which he communicated to his coadjutor Comenius, that he might publish them to all nations. Comenius, fearing that if he did not print them he should disobey God, and if he did he would be exposed to the ridicule of men, printed them, but would not distribute the copies, and entitled the book Lux in Tenebris. Some say Drabricius was burnt as a false prophet; others, that he died in Turkey.

DRABLER, in the sea language, a small sail in a ship, which is the same to a bonnet, that a bonnet is to a course, and is only used when the course and bonnet are too shoal to clothe the mast. See Bonnet and Course.

DRABLING, in angling, is a method of catching barbel. Take a large line of six yards; which, before fastening it to the rod, must be put through a piece of lead, that, if the fish bite, it may slip to and fro, and that the water may something move it on the ground; bait with a lob-worm well secured, and so by its motion the barbel will be enticed into the danger without suspicion. The best places are in running water, near piles, or under wooden bridges, supported with oaks floated and slimy.

DRABS, in the salt works, a kind of wooden boxes for holding the salt when taken out of the boiling pan; the bottoms of which are made shelving or inclining forwards, that the briny moisture of the salt may drain off.

DRAC, an imaginary being, formerly much dreaded by the country people in many parts of France. The dracs were supposed to be malicious, or, at least, tricksome demons; said to lay gold cups and rings over the surface of pits and rivers, as baits to draw women and children in.

DRACÆNA, in botany, a genus of the monogynia order, and hexandria class of plants: cor. sexpartite and erect; the filaments a little thicker about the middle; the berry trilocular and monospermous. Species, one only, a native of the West Indies.

DRACHM, *n. s.* } Fr. *dragme*; Span. and
Dram, *n. s.* & *v. n.* } Port. *drama*; Lat. *drachma*; Arab. *drahm*; Gr. δραχμη; Heb. דרמון, from דרך, a way, מנה, to spend; i. e. as much as would be expended by a traveller.—Or, says Parkhurst, because anciently equal to six οβολοι, or bars of iron, that a man could grasp in his hand, thus deriving it from the verb δρασσω, δεδραγμαι, to clutch. A coin; a weight; the eighth part of an ounce; a small definite quantity; a dose. The verb is sometimes used, vulgarly, for to drink drams.

True be it said, whatever man it said,
That love with gall and honey doth abound;
But if the one be with the other weighed,
For every *dram* of honey therein found,
A pound of gall doth over it redound. *Spenser.*

I could do this, and that with no rash potion,
But with a lingering *dram*, that should not work
Maliciously like poison. *Shakspeare. Winter's Tale.*

See here these movers, that do prize their honours
At a cracked *drachm*. *Id. Macbeth.*

The trial being made betwixt lead and lead, weighing severally seven *drams* in the air, the balance in the water weigheth only four *drams* and forty-one grains, and abateth of the weight in the air two *drams* and nineteen grains: the balance kept the same depth in the water. *Bacon.*

No hallowed oils, no gums I need,
No new-born *drams* of purging fire,
One rosy drop from David's seed
Was worlds of seas to quench thine ire:
O, precious ransom! which, once paid,
That consummatum est was said. *Wotton.*

He that has not religion to govern his morality, is not a *dram* better than my mastiff-dog. *Selden.*

If there had been but any *drachm* of good nature in these Hebrews, they had relented.
Bp. Hall. Contemplations.

No *dram* of judgment with thy force is joined,
Thy body is of profit, and my mind.
Dryden's Fables.

Every *dram* of brandy, every pot of ale that you drink, raiseth your character. *Swift.*

A second see, by meeker manners known,
And modest as the maid that sips alone;
From the strong fate of *drams* if thou get free,
Another Durfy, Ward! shall sing in thee. *Pope.*

DRACO, a celebrated lawgiver of Athens. When he exercised the office of archon, he made a code of laws for his fellow-citizens, wherein all crimes were made capital; and even idleness was punished with death as well as murder. These laws were at first enforced, but they were after-

wards neglected on account of their extreme severity; and Solon totally abolished them, except that one which punished a murderer with death. The respect of Draco's admirers proved fatal to him. When at Ægina, he appeared on the theatre, he was received with repeated applause; and the people, according to the custom of the Athenians, showed their respect by throwing their garments upon him. This was done in such profusion, that Draco was soon hid under them, and smothered. He lived about A. A. C. 624.

DRACO. See ASTRONOMY.

DRACO, the dragon, in zoo ogy, a genus belonging to the order of amphibia reptilia; the characters of which are: it has four legs, a cylindrical tail, and two membranaceous wings, radiated like the fins of a fish, by which he is enabled to fly, but not to any great distance at a time. There are two species, both harmless creatures, feeding on flies, ants, and small insects, viz. 1. D. præpos, with the wings fixed to the fore-legs. It is a native of America. 2. D. volans, the flying dragon, with the wings entirely distinct from the fore-legs. It is found in America and the East Indies.

DRACO VOLANS, in meteorology, a fiery exhalation, frequent in marshy and cold countries. It is most common in summer; and though principally seen playing near the banks of rivers, or in boggy places, yet sometimes mounts up to a considerable height in the air; its appearance being that of an oblong, sometimes roundish, fiery body, with a long tail. It is entirely harmless, frequently sticking on the hands and clothes of people without injuring them.

DRACOCEPHALUM, dragon's head, a genus of the gymnospermia order, and didynamia class of plants: COR. throat inflated, upper lip concave. There are thirteen species, most of them herbaceous, annual, or perennial, plants, from eighteen inches to three feet high, garnished mostly with entire leaves, and whorled spikes of small monopetalous and ringent flowers of a blue, white, or purple color. They are all easily propagated by seeds, which may be sown either in spring or autumn. They require no culture but to keep them clear from weeds.

DRACONARIUS, Gr. δρακοναριος, and δρακοντειοφορος, in antiquity, dragon-bearer. The Persians, Parthians, Scythians, &c., bore dragons on their standards; whence the standards themselves were called dracones. See next article. The Romans borrowed the custom from the Parthians; or, as Casaubon has it, from the Dacæ; or, as Codin, from the Assyrians. The Roman emperors carried it to Constantinople.

DRACONES, among the Romans, were figures of dragons, painted in red, on their flags, as appears from Ammianus Marcellinus: but among the Persians and Parthians they were like the Roman eagles, figures in full relievo; so that the Romans were frequently deceived, and took them for real dragons.

DRACONTIUM, in botany, dragons; a genus of the polyandria order, and gynandria class of plants; natural order second, piperitæ. The spatha is cymbiform, or shaped like a boat; the spadix covered all over: CAL. none; petals five; berries polyspermous. There are five species, all natives of the Indies. D. pertusum, with leaves having holes, and a climbing stalk. It is a native of most of the West-India islands, and has trailing stalks which put out roots at every joint, that fasten to the trunks of trees, walls, or any support which is near them, and thereby rise to twenty-five or thirty feet. This plant is easily propagated by cuttings; which if planted in pots filled with poor sandy earth, and plunged into a hot-bed, will soon put out roots; but the plants are so tender, that they must be preserved in a stove

DRACUNCULI, in medicine, small long worms which breed in the muscular parts of the arms and legs, called Guinea worms. This distemper is very common in Guinea, and particularly among the natives: Kempfer found it so also at Ormuz, upon the Persian Gulph, and likewise in Tartary; but this distemper is not so frequent any where as on the Gold Coast, at Anamaboe, and Cormantin. The worm is white, round, and uniform, very much resembling white round tape, or bobbin. It lodges between the interstices and membranes of the muscles, where it insinuates itself, sometimes exceeding five ells in length. It occasions no great pain at the beginning; but at such times as it is ready to make its exit, the part adjoining to the extremity of the worm, where it attempts its exclusion, begins to swell, throb, and be inflamed; this generally happens about the ancle, leg, or thigh, and seldom higher. The countries where this distemper is in any degree prevalent, are very hot and sultry, liable to great droughts, and the inhabitants make use of stagnating and corrupted water, in which it is very probable that the ova of these animalcula may be contained; for such white people as drink this water, are troubled with the disease as well as the negroes. Surgeons seldom attempt to extract this worm by making an incision; but as soon as they perceive the tumor rise to a competent bulk, they endeavour to bring it to a suppuration, with all convenient expedition; and then the head of the worm discovers itself, which they secure, by tying it to a bit of stick or cotton, that it may not draw itself up again: thus they continue to roll it round the stick, sometimes one inch, sometimes two or more, each day, taking care not to break the worm, for it would be very difficult to recover the end of it again; and an abscess would be formed, not only at the suppurated part, but likewise through the whole winding of the muscles, where the dead putrefying worm remains, which generally occasions very obstinate ulcers. During the extraction of the worm, the patient should be plied with bitter aloetic and other anthelmintic medicines, in order to dislodge the worm the sooner from his tenement. When the worm is totally extracted, the remaining ulcer may be treated in the same manner as other common ulcers; nor does any farther inconvenience remain in the parts of which it had possession. To prevent their forming again, wash the parts with wine, vinegar, alum, nitre, or common salt, or with a strong lixivium of oak-ashes, and afterwards anoint them with an ointment of the common kind used

for scorbutic eruptions, with a small mixture of quicksilver.

DRACUNCULUS, in botany. See ARUM.

DRACUT, a township of the United States, in the north part of Middlesex county, on the bank of the Merrimack, opposite Patucket Falls. It lies thirty miles north by west of Boston, and twenty-eight south-west of Exeter, in New Hampshire.

DRAD, *adj.* for dread, or the part. passive of *To* DREAD, which see. Terrible; formidable.

The utmost sand-breach they shortly fetch,
Whilst the *drad* danger does behind remain.
Faerie Queene.

DRAFF, *n. s.* } Sax. *drof*; Dutch, *draf*;
DRAF'FY, *adj.* } from Saxon, drabbe. Filth; offal. See DRAB.

Not a jest had they to keep their auditors from sleep but of swill and *draff*. Yes; now and then the servant put his hand into the dish before his master, and almost choaked himself, eating slovenly and ravenously to cause sport. *Surrey.*

Ve do not act, that often jest and laugh:
'Tis old, but true, still swine eat all the *draugh*.
Shakspeare.

You would think I had a hundred and fifty tattered prodigals lately come from swinekeeping, from eating *draff* and husks. *Shakspeare. Henry IV.*

'Twere simple fury, still thyself to waste
On such as have no taste;
To offer them a surfeit of pure bread
Whose appetite is dead!
No, give them grains their fill;
Husks, *draff*, to drink and swill. *Ben Jonson.*

Here rather let me drudge, and earn my bread,
Till vermin, or the *draff* of servile food,
Consume me. *Milton's Agonistes.*

Refuse; sweepings. Perhaps improper.

Younger brothers but the *draff* of nature. *Dryden.*

DRAG, *v. a., v. n.* & *n. s.* } Goth. *draga*;
DRAG'-NET, *n. s.* } Belgic, *trecken*; Sax. dragan; Lat. *traho*; Gr. δραττειν. To draw; to pull onwards; to draw that which is weighty or burdensome; hence to pull about with violence or ignominy: as a neuter verb, to hang down so as to sweep or trail on the ground. A drag-net is a net which is drawn along the bottom of the water.

They shall surprise
The serpent, prince of air, and *drag* in chains
Through all his realm, and there confounded leave.
Milton.

Who, that had seen and heard Saul breathing out threatenings, and executing his bloody cruelties upon the church of God; *dragging* poor Christians to their judgments and executions; would not have given him up for a man branded for hell? *Bp. Hall.*

The constable was no sooner espied but he was reproached with disdainful words, beaten and *dragged* in so barbarous a manner, that he hardly escaped with his life. *Clarendon.*

You may in the morning find it near to some fixed place, and then take it up with a *drag*-hook, or otherwise. *Walton.*

He triumphs in St. Austin's opinion; and is not only content to *drag* me at his chariot-wheels, but he makes a shew of me. *Stillingfleet.*

Some fishermen, that had been out with a *drag-net*, and caught nothing, had a draught towards the evening, which put them in hope of a sturgeon at last. *L'Estrange.*

Dragnets were made to fish within the deep,
And castingnets did rivers' bottoms sweep.
May's Virgil.

'Tis long since I, for my celestial wife,
Loathed by the gods, have *dragged* a lingering life.
Dryden.

From hence are heard the groans of ghosts, the pains
Of sounding lashes, and of *dragging* chains. *Id.*

The creatures are but instruments in God's hand: the returning our acknowledgments to them is just the same absurdity with theirs who burnt incense to the *drag*, and sacrificed to the net. *Rogers.*

While I have any ability to hold a commerce with you, I will never be silent; and this chancing to be a day that I can hold a pen, I will *drag* it as long as I am able. *Swift.*

Can I, who loved so well,
To part with all my bliss to save my lover,
Oh! can I *drag* a wretched life without him?
Smith.

The *drag* is made somewhat like a low car: it is used for the carriage of timber, and then is drawn by the handle by two or more men. *Moxon's Mech. Exer.*

A door is said to *drag*, when, by its ill hanging on its hinges, the bottom edge of the door rides in its sweep upon the floor. *Id.*

Whatsoever old Time, with his huge *dragnet*, has conveyed down to us along the stream of ages, whether it be shells or shellfish, jewels or pebbles, sticks or straws, sea-weeds or mud, these are the ancients, these are the fathers. *Watts.*

Warburton attacks the revisal of Shakspeare's text with a gloomy malignity, as if he were *dragging* to justice an assassin or incendiary. *Johnson.*

We can only lament their fate, and still more that of a sailor, who is often *dragged* by force from his honest occupation, and compelled to imbrue his hands in perhaps innocent blood. *Franklin.*

Thou wast the veriest slave in days of yore,
That ever *dragged* a chain, or tugged an oar.
Cowper.

Here, sheltering from the sons of murder,
The hares *drag* their tired limbs no further. *Beattie.*

DRAG, in sea language, is a machine consisting of a sharp, square, iron ring, encircled with a net, and commonly used to take the wheel off from the platform or bottom of the decks. The word is also used for whatever hangs over the ship in the sea, as shirts, coats, or the like; boats, when towed, or whatever else may retard the ship's way when she sails.

DRAG'GLE, *v. a.* & *v. n.* From drag. To make or become dirty, by dragging on the ground

His *draggling* tail hung in the dirt,
Which on his rider he would flirt. *Hudibras.*

He wore the same gown five years, without *dragging* or tearing. *Swift.*

You'll see a *draggled* damsel, here and there,
From Billingsgate her fishy traffick bear.
Gay's Trivia.

DRAGOMAN, or DROGMAN, a term of general use through the east for an interpreter, whose office is to facilitate commerce between the orientals and occidentals. These are kept by the ambassadors of Christian nations residing at the Porte for this purpose. The word is formed from the Arabic targemen or targiman, of the verb taragem, 'he has interpreted.' From dra-

goman the Italians formed dragomano, and, with a nearer relation to its Arabic etymology, turcimanno; whence the French and our trucheman, as well as dragoman and drogman.

DRAG'ON, *n. s.* / DRAG'ONET, *n. s.* / DRAG'ON-FLY, *n. s.* / DRAG'ONISH, *adj.* / DRAG'ON-LIKE, *adj.* } French, Ital., Span. and Port. *dragon*; Saxon, dracan; Lat. *draco*; Gr. δράκωμι, from δερκειν, seeing, because the dragon is said to be possessed of a keen and watchful eye.—Minsheu. A real or supposed flying serpent; hence a fierce animal or man, and a fierce kind of fly: dragonet is a diminutive of dragon.

He caughte the *dragoun*, the elde serpent, that is the deuel and sathanas, and he boond hym bi a thousynde gheeris. *Wiclif. Apoc.* xx.

And ever as he rode, his hart did earne
To prove his puissance in battell brave
Upon his foe, and his new force to learne;
Upon his foe, a *dragon* horrible and stearne.
Spenser. Faerie Queene.

Or in his womb might lurk some hidden nest
Of many *dragonets*, his fruitful seed. *Id.*

I go alone,
Like to a lonely *dragon*, that his fen
Makes feared and talked of more than seen.
Shakspeare.

He fights *dragonlike*, and does achieve
As soon as draw his sword. *Id. Coriolanus.*

The body of the cantharides is bright-coloured; and it may be, that the delicate coloured *dragon-flies* ma have likewise some corrosive quality.
Bacon's Natural History.

ake *dragonsblood*, beat it in a mortar, and put it in a cloth with aqua vitæ, and strain them together.
Peacham.

And you, ye *dragons!* of the scaly race,
Whom glittering gold and shining armours grace;
In other nations harmless are you found,
Their guardian genii and protectors owned. *Rowe.*

On spiery volumes there a *dragon* rides;
Here, from our strict embrace, a stream he glides.
Pope.

Dragonsblood is a resin, so named as to seem to have been imagined an animal production. *Hill.*

So, borne on brazen talons, watched of old
The sleepless *dragon* o'er his fruits of gold. *Darwin.*

DRAGON, in botany. See ARUM.

DRAGON, in zoology. See DRACO.

DRAGON, WILD. See ARTEMISIA.

DRAGONET, or DRAGON-FISH, in ichthyology. See CALLIONYMUS.

DRAGON FLY. See LIBELLULA.

DRAGON GUM, or GUM TRAGACANTH. See ASTRAGALUS.

DRAGONS-BLOOD, a gummi-resinous substance brought from the East Indies, either in oval drops wrapped up in flag leaves, or in large masses composed of smaller tears. It is said to be principally obtained from the dracæna draco, the pterocarpus draco, and several other vegetables. The fine dragon's blood of either sort breaks smooth, free from any visible impurities, of a dark red color, which changes, upon being powdered, into an elegant bright crimson. Several artificial compositions, colored with the true dragon's blood, or Brasil wood, are sometimes sold for this commodity. Some of these dissolve like gums in water; others crackle in the fire without proving inflammable; whilst the genuine sanguis draconis readily melts and catches flame, and is not acted on by watery liquors. It totally dissolves in pure spirit, and tinges a large quantity of the menstruum of a deep red color. It is likewise soluble in expressed oils, and gives them a red hue, but less beautiful than that communicated by anchusa. This drug, in substance, has no sensible smell or taste; when dissolved, it discovers some degree of warmth and pungency. A solution of dragon's blood in spirit of wine is used for staining marble, to which it gives a red tinge, which penetrates more or less deeply according to the heat of the marble during the time of application. But as it spreads at the same time that it sinks deep, for fine designs the marble should be cold.

DRAGON'S HEAD. See DRACOCEPHALUM.

DRAGON'S HEAD AND TAIL, caput and cauda draconis, in astronomy, are the nodes of the planets; or the two points in which the ecliptic is intersected by the orbits of the planets, and particularly that of the moon; making with it angles of 5° 18′. One of these points looks northward, the moon beginning then to have north latitude, and the other southward, where she commences south. Thus her deviation from the ecliptic seems, according to the fancy of some, to make a figure like that of a dragon, whose belly is where she has the greatest latitude; the intersection representing the head and tail, from which resemblance the denomination arises. But these points abide not always in one place, but have a motion of their own in the zodiac, retrograde-wise 3′ 11″ per day; completing their circle in eighteen years 225 days; so that the moon can be but twice in the ecliptic during her monthly period, but at all other times she will have a latitude or declination from the ecliptic. About these points of intersection all eclipses happen. They are usually denoted by these characters ☊ dragon's head, and ☋ dragon's tail.

DRAGON TREE. See DRACONTIUM.

DRAGON WORT. See ARTEMISIA.

DRAGOON', *v. a.* & *n. s.* Fr. *dragon*. Supposed to have been derived from dragon, 'because mounted on horseback with lighted match, he seemethe like a fiery dragon' (Preface to Dr. Meyrick's Ancient Armour); or from the Latin *draconarii*, horse-soldiers who bore dragons for ensigns. See the article. The verb is derived from the noun.

Two regiments of *dragoons* suffered much in the late action. *Tatler.*

In politicks I hear you're staunch,
Directly bent against the French;
Deny to have your free-born foe
Dragooned into a wooden shoe. *Prior.*

Will the famished wretch who has braved your bayonets be appalled by your gibbets? When death is a relief, and the only relief it appears that you will afford him, will he be *dragooned* into tranquillity?
Byron.

DRAGOONS are divided into brigades as the cavalry: and each regiment into troops; each troop having a captain, lieutenant, cornet, quarter-master, two serjeants, three corporals, and two drums. Some regiments have hautboys. They are very useful on any expedition that

requires despatch; for they can keep pace with the cavalry, and do the duty of infantry: they encamp, generally, on the wings of the army, or at the passes leading to the camp; and sometimes they are brought to cover the general's quarters; they march in front and rear of the army. The first regiment of dragoons raised in England was in 1681, and called the regiment of dragoons of North Britain. In battles or attacks they generally fight sword in hand after the first fire. Their arms are, a sword, firelock, and bayonet, to which pistols are now generally added.

DRAGOONING, a term that has been used to express the horrible persecution and oppression inflicted on the French Protestants under Louis XIV. after the revocation of the edict of Nantes. By these means the Protestants in Montauban alone were, in four or five days, stripped of above a million of money. Their dining-rooms were turned into stables; and the owners of the houses where the military were quartered were treated with every possible indignity and cruelty, without intermission. At Negreplisse, a town near Montauban, they hung up Isaac Favin, a Protestant citizen of that place, by his arm-pits, and tormented him a whole night, by pinching and tearing off his flesh with pincers. They made a great fire round a boy of about twelve years old, who, with hands and eyes lifted up to heaven, cried out, 'My God, help me;' And when they found the youth resolved to die rather than renounce his religion, they snatched him from the fire just as he was on the point of being burnt. In several places the soldiers applied red-hot irons to the hands and feet of men and breasts of women. At Nantes they hung up several naked woman by their feet, and others by their arm-pits, and thus exposed them to public view. They bound to posts mothers that gave suck, and let their sucking infants lie languishing in their sight for several days and nights, crying, mourning, and gasping for life. Some they bound before a great fire, and, being half roasted, let them go. Amidst a thousand hideous cries and blasphemies, they hung up men and women on hooks in chimneys by the hair, and feet, and suffocated them with wisps of wet hay. Some they tied under the arms with ropes, and plunged them again and again into wells: but we cannot proceed in these shocking details. If any to escape these barbarities endeavoured to save themselves by flight, they pursued them into the fields and woods, where they were hunted down like wild beasts, and prohibited at the same time from departing the kingdom, upon pain of confiscation of their effects.

DRAGUIGNAN, a town of France, the capital of the department of the Var, Provence, is situated in a fertile plain, on the river Pis. The bishops of Frejus had formerly a palace here. The town is the seat of the courts of provincial justice, and has a public library There is little trade, and the manufactures are coarse cloth, soap, oil, and sugar of lead, the two last being made in considerable quantities. The wine raised on the sides of the neighbouring hills is remarkable for its strength. The general trade is by no means considerable. Population about 5000. Thirty-five miles north-east of Toulon.

DRAIN, *v. a.* & *n. s.* } Fr. *trainer;* Teut.
DRAIN'AGE. } *tranen*, part. of verb drygan, Sax. to expel; and therefore to dry, according to Mr. Tooke; or from *drehnigean*, to strain, says Mr. Todd. To draw off; to empty of a fluid gradually; to make dry: as a substantive, it means the channel, or course of the water or fluid taken off. Drainage is the act or system of draining.

The fountains *drain* the water from the ground adiacent, and leave but sufficient moisture to breed moss. *Bacon.*

In times of dearth it *drained* much coin of the kingdom, to furnish us with corn from foreign parts. *Id. to Villiers.*

Sinking waters, the firm land to *drain*,
Filled the capacious deep, and formed the main
Roscommon.

The royal babes a tawny wolf shall *drain*.
Dryden.

While cruel Nero only *drains*
The mortal Spaniard's ebbing veins,
By study worn, and slack with age,
How dull, how thoughtless is his rage! *Prior.*

Had the world lasted from all eternity, these comets must have been *drained* of all their fluids. *Cheyne.*

When wine is to be bottled wash your bottles, but do not *drain* them. *Swift's Directions to the Butler.*

Whilst a foreign war devoured our strength, and *drained* our treasures, luxury and expences increased at home. *Atterbury.*

That boy was blest,
Whose infant lips have *drained* a mother's breast.
Gay.

By oppression's woes and pains!
By your sons in servile chains!
We will *drain* our dearest veins,
But they shall be—shall be free! *Burns.*

Strike up the dance, the cava bowl fill high,
Drain every drop!—to-morrow we may die.
Byron.

In cases which arise from springs, as well as those which are produced by the stagnation of surface water, it will frequently be necessary, in order to effect their *drainage*, to have one or more deep open cuts, brought up in a proper direction from the lowest point at which the water can be discharged. *Dr. A. Rees.*

DRAINS, in the fen countries, are certain large cuts or ditches of twenty or thirty, nay sometimes forty feet wide, carried through the marshy ground to some river or other place, capable of discharging the water out of the fen lands. To clear wet and boggy lands of their superfluous moisture, is an art of the highest importance, not only to the agriculture, but to the health of a country; yet it is only of late years that the principles of this art became well understood, and opened the way for many improvements. Dr. James Anderson of Edinburgh, in his Essays on Agriculture, seems to have been the first who treated the subject scientifically; but before quoting his ingenious introductory observations, it may be remarked, that land becomes charged with moisture from two causes: 1. From water collected in the higher grounds, and filtrating among the different beds of gravel and other porous materials, forming springs below, and flowing over the surface, or stagnating underneath it. 2. From

rain or water lodging and becoming stagnant on the surface, from the clayey or impervious nature of the soil or superior stratum. The first of these is the cause of bogs, swamps, and morasses, and is the most difficult to remedy. Dr. Anderson says, 'springs are formed in the bowels of the earth, by water percolating through the upper strata where that is of a porous texture, which continues to descend downwards till it meets with a stratum of clay that intercepts it in its course; where, being collected in considerable quantities, it is forced to seek a passage through the porous strata of sand, gravel, or rock, that may be above the clay, following the course of these strata till they approach the surface of the earth, or are interrupted by any obstacle which occasions the water to rise upwards, forming springs, bogs, and the other phenomena of this nature; which, being variously diversified in different circumstances, produce that variety of appearance in this respect that we often meet with. This being the case, we may naturally conclude that an abundant spring need never be expected in any country that is covered to a great depth with sand, without any stratum of clay to force it upwards, as is the case in the sandy deserts of Arabia, and the immeasurable plains of Libya: neither are we to expect abundant springs in any soil that consists of a uniform bed of clay from the surface to a great depth; for it must always be in some porous stratum that the water flows in abundance; and it can be made to flow horizontally in that, only when it is supported by a stratum of clay, or other substance that is equally impermeable by water. Hence the rationale of that rule so universally established in digging for wells, that if you begin with sand, gravel, &c. you need seldom hope to find water till you come to clay; and, if you begin with clay, you can hope for none in abundance till you reach to sand, gravel, or rock. It is necessary that the farmer should attend to this process of nature with care, as his success in draining bogs, and every species of damp and spouting groud, will in a great measure depend upon his thorough knowledge of this,—his acuteness in perceiving in every case the variations that may be occasioned by particular circumstances—and his skill in varying the plan of his operations according to these. As the variety of cases that may occur in this respect is very great, it would be a very tedious task to enumerate the whole, and describe the particular method of treating each; I shall therefore content myself with enumerating a few particular cases, to show in what manner the principles above established may be applied to practice.'

Let fig. 1. Plate Dogs and Drains represent a perpendicular section of a part of the earth, in which A B is the surface of the ground, beneath which are several strata of porous substances, which allow the water to sink through them till it reaches the line C D, that is supposed to represent the upper surface of a solid bed of clay; above which lies a stratum of rock, sand, or gravel. In this case, it is plain, that when the water reaches the bed of clay, and can sink no farther, it must be there accumulated into a body; and seeking for itself a passage, it flows along the surface of the clay, among the sand or gravel, from D towards C; till at last it issues forth, at the opening A, a spring of pure water. If the quantity of water that is accumulated between D and C is not very considerable, and the stratum of clay approaches near the surface; in that case, the whole of it will issue by the opening at A, and the ground will remain dry both above and below it. But if the quantity of water is so great, as to raise it to a considerable height in the bed of sand or gravel, and if that stratum of sand is not discontinued before it reaches the surface of the ground, the water, in this case, would not only issue at A, but would likewise ooze out in small streams through every part of the ground between A and *a*; forming a barren patch of wet, sandy, or gravelly ground upon the side of a declivity, which every attentive observer must have frequently met with. To drain a piece of ground in this situation is perhaps the most unprofitable task that a farmer can engage in; not only because it is difficult to execute, but also because the soil that is gained is but of very little value. However, it is lucky, that patches of this kind are seldom of great breadth, although they sometimes run along the side of the declivity in a horizontal direction for a great length. The only effectual method of draining this kind of ground, is to open a ditch as high up as the highest of the springs at *a*, which should be of such a depth as not only to penetrate through the whole bed of sand or gravel, but also to sink so far into the bed of clay below as to make a canal therein sufficiently large to contain and carry off the whole of the water. Such a ditch is represented by the dotted lines *a e z*: but as the expense of making a ditch of such a depth as this would suppose, and of keeping it afterwards in repair, is very great, it is but in very few cases that this mode of draining would be adviseable; and never, unless where the declivity happens to be so small, as that a great surface is lost for little depth, as would have been the case here if the surface had extended in the direction of the dotted line *a d*. But supposing that the stratum of clay, after approaching toward the surface at A, continued to keep at a little depth below ground; and that the soil which lay above it was of a sandy or spongy nature, so as to allow the water to penetrate it easily; even supposing the quantity of water that flowed from D to C was but very inconsiderable, instead o rising out at the spring A, it would flow forward along the surface of the clay among the porous earth that forms the soil, so as to keep it constantly drenched with water, and of consequence render it of very little value. Wetness arising from this cause, is usually of much greater extent than the former: and, as it admits of an easy cure, it ought not to be one moment delayed; as a ditch of a very moderate depth opened at A, and carried through a part of the stratum of clay (as represented by the dotted lines A *k f*), would intercept and carry off the whole of the water, and render the field as dry as could be desired. It is, therefore, of very great consequence to the farmer, accurately to distinguish between these two cases, so nearly allied to each other in appearance; and, as this can be easiest done by boring, every one

who has much ground of this kind ought to provide himself with a set of boring irons, which he will likewise find use for on other occasions. I might here enumerate a great variety of cases which might be reduced to the same head with the foregoing: but as any attentive reader may, after what has been said, be able easily to distinguish these, I shall only in general observe, that every soil of a soft and porous texture, that lies upon a bed of hard clay, whatever its situation in other respects may be, will in some measure be subject to this disease. And, if it is upon a declivity of any considerable length, the undermost parts of the field will be much damaged by it, unless ditches are thrown up across the declivity, at proper distances from one another, to intercept the water in its descent. It may not likewise be improper here to observe, that in cases of this nature, unless where the soil is of a very great depth, the malady will always be increased, by raising the ridges to a considerable height; as will appear evident by examining fig. 2; in which the line AB represents the surface of a field of this nature, and CD the surface of the bed of clay. Now, if this field were raised into high ridges, as at FFF, so that the furrows EEE descended below the surface of the clay, it is plain, that all the water that should sink through the middle of the ridge, would run along the surface of the clay till it came to the sides of the ridge LLLLLL, which would thus be kept continually soaked with water. Whereas, if the ground had been kept level, as in the part of the field from G to H, with open furrows H, at moderate distances from each other, the water would immediately sink to the clay, and be carried off by the furrows, so as to damage the soil far less than when the ridges are high. If the soil is so thin as that the plough can always touch the clay, the ridges ought to be made narrow and quite flat, as from G to H: but if there is a little greater depth of soil, then it ought to be raised into ridges of a moderate height, as from H to B, so as to allow the bottom of the furrow to reach the clay: but neither is this necessary where the soil is of any considerable depth. I have seen some industrious farmers, who, having ground in this situation, have been at the very great expense of making a covered drain in each furrow. But, had they rightly understood the nature of the disease, they never would have thought of applying such a remedy; as must appear evident at first sight to those who examine the figure. The success was what might be expected from such a foolish undertaking. These observations, it is hoped, will be sufficient as to the manner of treating wet, sandy, or porous soils. I now proceed to take notice of such as are of a stiff, clayey nature, which are often very different in appearance, and require a different treatment from these. Suppose that (in fig. 3) the stratum of sand or gravel DC should be discontinued, as at E, and that the stratum above it should consist of a coherent clayey nature. In this case, the water that flowed towards E, being there pent in on every side, and being accumulated there in great quantities, it must at length force a passage for itself in some way; and pressing strongly upon the upper surface, if any one part is weaker than the rest, it there would burst forth and form a spring (as suppose at A). But if the texture of every part of this stratum were equally strong, the water would squeeze through many small crannies, and would ooze out in numberless places, as between A and F, so as to occasion that kind of wetness that is known by the name of a spouting clayey soil. The cure, in this case, is much more easily effected than in any of the former; for if a ditch of a considerable size is opened, as at A, towards the lowermost side of the spouting ground, so deep as to penetrate through the upper stratum of clay, and reach to the gravel, the water will rise up through it at first with very great violence, which will gradually decrease as the pressure from the water behind is diminished; and when the whole of the water accumulated in this subterraneous reservoir has run off, there being no longer any pressure upon the clay above it, the whole soon becomes as dry as could be desired, and continues so ever afterwards, if the ditch is always kept open. This I speak from experience, having rendered some fields of this kind that were very wet, quite dry by this method of treating them. It will hardly be necessary for me here to put the farmer upon his guard, to be particularly careful in his observations, that he may distinguish between the wetness that is produced from this cause, and that which proceeds from the cause before mentioned; because the treatment that would cure the one would be of no use at all to the other. The attentive observer likewise will readily perceive, that if any field that is wet from this cause admits of being ploughed, it will be in equal danger of being hurt by being raised into high ridges, with the other kind of damp ground before mentioned. For, as the depth of earth above the reservoir would be smaller in the deep furrows than any where else, there would, of consequence, be less resistance to the water in that place, so that it would arise there in greater abundance. And if, in this case, a farmer should dig a drain in each furrow, as a considerable quantity of water would rise into them, in some cases the ground might be improved, or even quite drained thereby, especially if they should have accidentally reached the gravel in any one place; although at an expense much greater than was necessary. I take notice of this circumstance, in some measure to prevent the prejudice, that some inattentive observers might entertain, against what was said before of this method of draining, from their having accidentally seen some fields that may not have been bettered by it.'

'Bogs,' continues the doctor, 'are only a variety of this last-mentioned kind of wet ground; and therefore ought, in general, to be drained after the same manner with them. Clay is a substance that strongly resists the entrance of water into it: but when it is long drenched with it, it is, in process of time, in some measure, dissolved thereby, loses its original firmness of texture and consistence, and becomes a sort of semi-fluid mass, which is called a bog; and as these are sometimes covered with a strong scurf of a particular kind of grass, with very matted roots, which is strong enough to bear a

small weight without breaking, although it yields very much, it is in these circumstances called a swaggle. But, whatever be the nature of the bog, it is invariably occasioned by water being forced up through a bed of clay, as just now described, and dissolving or softening, if you will, a part thereof: I say only a part; because whatever may be the depth of the bog or swaggle, it generally has a partition of solid clay between it and the reservoir of water under it, from whence it originally proceeds: for if this were not the case, and the quantity of water were considerable, it would meet with no sufficient resistance from the bog, and would issue through it with violence, and carry the whole semi-fluid mass along with it. But this would more inevitably be the case if there was a crust at the bottom of the bog, and if that crust should ever be broken, especially if the quantity of water under it were very considerable: and as it is probable, that in many cases of this sort, the water slowly dissolves more and more of this under crust, I make no doubt, but that in the revolution of many ages a great many eruptions of this kind may have happened, though not deemed of sufficient importance to have the history of them transmitted to posterity. Of this kind, although formed of a different substance, I consider the flow of the Solway moss, in Northumberland, to have been; which, upon the 16th of November, 1771, burst its former boundaries, and poured forth a prodigious stream of semi-fluid matter, which in a short time covered several hundred acres of very fine arable ground. Nor will any one, who is acquainted with the nature of moss, who knows its resemblance to clay, in its quality of absorbing and retaining water, and its very easy diffusibility therein, be surprised at this; as, from all these properties, it is much better adapted for forming an extensive bog, and therefore in greater danger of producing an extensive devastation by an eruption of the water into it, than those that are formed of any kind of clay whatever. If the bog or swampy ground is upon a declivity, the ditch ought to be carried across the field about the place where the lowest springs arise. But if the surface of the ground is level, or nearly so, as between A and B, fig. 4, and the springs break out in several places, *q q q q q*, so as to form soft quagmires, interspersed through the whole of the field, it will be of little consequence in what part the drain is opened; for if it be dug up so deep as to allow the water to rise in it with freedom, it will issue through that opening, and the field will be left perfectly dry. But as it may frequently happen that the stratum of gravel should be at a considerable depth beneath the surface of the earth, and as it may be sometimes even below the level of the place into which the drain must be emptied, it might sometimes be extremely difficult to make a ditch so deep as to reach the bed of sand or gravel. But it is lucky for us that this is not absolutely necessary in the present case; as a drain of two or three feet deep, as at D, will be equally effectual with one that should go to the gravel. All that is necessary in this case, is to sink pits P in the course of the drain, at a moderate distance from one another, which go so deep as to reach the gravel; for, as the water there meets with no resistance, it readily flows out at these openings, and is carried off by the drain without being forced up through the earth; so that the ground is left entirely dry ever after. I have likewise drained several fields in this way; and, as I have generally found the appearance pretty much alike, I shall, for the information of the inexperienced reader, give a short account of them. If you attempt to make your pit in one of these soft quaggy places where the water is found in great abundance, you will meet with very great difficulty in forming it; for, as the substance of which it is composed is soft, it will always flow into the hole as fast as you dig it; on which account I would advise, not to attempt to make the pit in the swaggle, but as near it in the solid earth as you conveniently can. However, if it is pretty firm, and of no great extent, it is sometimes practicable to make a pit in the soft bog at the driest time of the year. This I have sometimes practised, which gave me an opportunity of observing the nature of these bogs more perfectly than I otherwise should have had. In the trials of this kind that I have made, this soft quaggy ground has seldom been above three or four feet deep, below which I have always found a stratum of hard tough clay usually mixed with stone; and so firm, that nothing but a mattock or pick-axe could penetrate it; and, as this is comparatively so much drier than the ground above it, an inexperienced operator is very apt to imagine that this is the bottom that he is in search of. In digging through this stratum you will frequently meet with small springs oozing out in all directions; some of them that might fill the tube of a small quill, and others so small as to be scarcely perceptible; but, without regarding these, you must continue to dig on, without intermission, till you come to the main body of the reservoir, if I may so call it, that is contained in the rock, gravel, or sand; which you will generally find from two to four feet below the bottom of the swaggle, and which you will be in no danger of mistaking when you come to it: for, if there has been no opening made before that in the field, as soon as you break the crust immediately above the gravel or rock, the water bursts forth like a torrent; and, on some occasions, rises like a jet d'eau to a considerable height above the bottom of the ditch; and continues to flow off with great impetuosity for some time, till the pent up water being drained off, the violent boiling up begins to subside, and the strength of the current to abate; and, in a short time, it flows gently out like any ordinary spring; —allowing it to remain in this state, the quaggy earth begins to subside, and gradually becomes firmer and firmer every day; so that, in the space of a few months, those bogs which were formerly so soft as hardly to support the weight of a small dog, become so firm, that oxen and horses may tread upon them without any danger of sinking, at the very wettest season of the year. I have had a field of this nature, that, by having only one such pit as I have now described opened in it, was entirely drained to the distance of above 100 yards around it in every direction. But as it is possible that the stratum in which the water

runs may be in some places interrupted, it will be in general expedient to make several of these pits, if the field is of great extent; always carrying the drain forward through the lowermost part of the field, or as near the quag as you conveniently can; and sinking a pit wherever you may judge it will be most necessary. But, if the stratum of gravel is not interrupted, there will be no violent burst of water at opening any of these after the first, as I have frequently experienced. To keep these wells from closing up after they are made, it is always expedient to fill them up with small stones immediately after they are made, which ought to rise to the height of the bottom of the drain. I have often imagined, that the expense of digging these pits might be saved by boring a hole through this solid stratum of clay with a large wimble made on purpose; but, as I never experienced this, I cannot say whether or not it would answer the desired end exactly. If the whole field that is to be drained consists of one extensive bog, it will require a *long time* before the whole work can be entirely finished, as it will be impossible to open a drain through it till one part of it is first drained, and becomes solid ground. In a situation of this kind, the undertaker, after having opened a drain to convey the water from the lowest part of the bog, must approach as near to the swampy ground as he can, and there make his first pit; which will drain off the water from the nearest parts of the bog. When this has continued open for some time, and that part of the bog has become so solid as to admit of being worked, let him continue the ditch as far forward through it as the situation it is in will admit of, and there sink another pit, and proceed gradually forward in the same manner; making cross cuts where necessary, till the whole be finished. In this manner, may any bog or track of spouting ground of this nature, be rendered dry at a very inconsiderable expense; and, as there can be no other method of draining ground of this sort effectually, I recommend the study of it to the attention of every diligent farmer who may have occasion for it. Let him first be extremely cautious in examining all the circumstances of his particular fields, that he may be certain which of the classes above enumerated it may be ranked with; and, when he is perfectly sure of that, he may proceed without fear, being morally certain of success. There is, however, one kind of damp ground not yet particularly specified, that I have purposely omitted taking notice of till this time, as I have never had any opportunity of examining particularly into the nature of it, nor of ascertaining, by experience, what is the most proper method of treating it. The soil I have now particularly *in my eye*, consists of a deep strong clay that does not vary its nature even on the surface, but in as far as manures may have rendered it more friable and tender; the color usually inclines to a reddish cast, and, for the most part, it is situated upon the side of some declivity. This bed of clay reaches to a great depth, without any variation, and is intermixed with a considerable quantity of small round stones. Many soils, of the sort now described, are apt to be continually moist and full of water during the winter season; but when the dry weather of summer sets in, the moisture is diminished, and the surface becomes hard; and it is rent into many large gaps which allow free admission to the sun and air, so as to scorch up almost every plant that is sowed upon it; and, as these soils are usually in themselves naturally fertile when drained, it were to be wished that some method could be discovered, that would be less expensive than what is usually practised with regard to some soils of this kind in Essex; where they make covered drains of two feet and a half deep, running diagonally through the whole field, at the distance of twenty feet from each other.'

In the Georgical Essays, T. B. Bayley, Esq. of Hope, near Manchester, gives the following directions for making covered drains:—'First make the main drains down the slope or fall of the field. When the land is very wet, or has not much fall, there should, in general, be two of these to a statute acre; for the shorter the narrow drains are, the less liable they will be to accidents. The width of the trench for the main drains should be thirty inches at top, but the width at the bottom must be regulated by the nature and size of the materials intended to be used. If the drain is to be made of bricks ten inches long, three inches thick, and four inches in breadth, then the bottom of the drain must be twelve inches; but if the common sale bricks are used, then the bottom must be proportionably contracted. In both cases there must be an interstice of one inch between the bottom brick and the sides of the trench, and the vacuity must be filled up with straw, rushes, or loose mould. For the purpose of making these drains, I order my bricks to be moulded ten inches long, four broad, and three thick, which dimensions always make the best drains. The method I pursue in constructing my main drains is as follows: when the ground is soft and spongy, the bottom of the drain is laid with bricks placed across. On these, on each side, two bricks are laid flat, one upon the other, forming a drain six inches high and four broad, which is covered with bricks laid flat. When the bottom of the trench is found to be a firm and solid body, as clay, or marle, the bottom of the drain does not then require being laid with bricks. In that case, the sides are formed by placing one brick edgeways, instead of two laid flat. This latter method is much cheaper, and in such land equally durable with the other. When stones are used instead of bricks, the bottom of the drain should be about eight inches in width. And here it will be proper to remark, that, in all cases, the bottom of the main drains must be sunk four inches below the level of the narrow ones, even at the point where the latter fall into them. The main drains should be kept open till the narrow ones are begun from them, after which they may be finished; but before the earth is returned upon the stones or bricks, it will be advisable to throw in straw, rushes, or brush-wood, to increase the freedom of the drain. The small narrow drains should be cut at the distance of sixteen or eighteen feet from each other, and should fall into the main drain at very acute angles, to prevent any stoppage. At the point where they fall

in, and eight or ten inches above it, they should be made firm with brick or stone. These drains should be eighteen inches wide at top, and sixteen at bottom.' See plate Dogs and Drains. Fig. 3, represents a field with drains, laid out according to Mr. Bayley's method. The black lines represent the main drains, and the dotted lines represent the narrow drains communicating with the former from all parts of the field.

About the same time that Dr. Anderson had reduced the system of draining to scientific principles in Scotland, Mr. Joseph Elkington, of Princethorpe, in Warwickshire, appears to have made some similar discoveries in England. The priority, indeed, is claimed by Dr. Anderson, but as each party has his merits, and as the public is, doubtless, highly indebted to both, we shall not presume to decide upon this point. The great object of Mr. Elkington's system is the draining of lands rendered wet by waters confined beneath the surface, and attempting to rise in the manner of springs. Among these, bogs or morasses are the chief. Having attempted, a considerable number of years ago, to drain a piece of ground of this kind on his farm at Princethorpe, by making a trench of five feet deep, but without success, he thought it might be of use to know, what kind of strata lay under the trench. Accordingly, he forced an iron crow, of about an inch and a half in diameter, three feet down, and upon taking it out, was agreeably surprised, to find a great quantity of water burst forth, and run down the trench. This led him to think of applying an auger, an instrument fitter for the purpose of boring, which, upon trial, he found equalled his expectations; and, by continuing the same plan with the auger, he at last drained all the wet parts of his farm, which were numerous, and had proved destructive to his sheep, by inducing the rot. When a morass is to be drained, his first object is to ascertain the direction in which the trench is to be dug. The substance of his rules for this, as laid before the Board of Agriculture in 1796, are these: 1. To obtain as much knowledge as possible respecting the strata in the neighbourhood. 2. To direct the trench so as to hit the bottom of the bed, which occasions the mischief, and the particular spot where the main spring lies. 3. If there are various beds through which the water issues, to prefer the stone one for draining the whole; and to make the trench from six to eight yards from the tail of the bed, where the rock ends, because in limestone, and other rocks, the tail, as it is technically termed, is harder than any other part of the rock; but a few yards above it, it is softer, and the water is more accessible. The tail of these beds may often be found jutting out in a point. 4. To direct the trench in a line with the bottom of the hill; as it makes the best separation between the upland and meadow enclosures, where the spring can be best intercepted. The trench, however, must be carried in or near the line of the spring; for, if it diverges to any distance, all chance of reaching the spring by tapping is over, and the labor of digging it probably lost. 5. To make a new trench, rather than to to tap the spring in any old brook, or run of water. 6, and lastly, having fixed on the line of direction, and marked out the trench, to begin at the bottom or lowest level, carrying the trench gradually up. The fall of the water need not be above a few inches in 100 yards. The auger, which must often be used for tapping, need not exceed two inches in diameter. Mr. Elkington bored a hole with one, to the depth of thirty feet, which threw up water equal to three hogsheads in a minute, and completely drained all the neighbourhood. In such cases, farther operations in draining are unnecessary. In other cases, the trench being once made, and the spring cut off, by tapping, or otherwise, it remains only to determine, whether it is to be kept open or covered. If the drain can be made a fence, he prefers leaving it open; if not, to cover it. His mode is, to make it square, either of brick or flat stones. A trench made of a particular kind of bricks, invented by Mr. Elkington, may last for fifty, or even 100 years. Mr. Elkington proposes a farther improvement of this discovery, by applying the treasures of water thus obtained to the purpose of flooding dry grounds, as well as to the turning of mills, and to other engines used in manufactures.

On the drainage of *mixed* and *varied* soils of the clayey kind, we have the following useful observations in Mr. Loudon's Encyclopedia of Agriculture :—'The business of draining is here,' he remarks, 'considerably more tedious and difficult than where the superficial and internal parts have greater regularity. In such sorts of lands, as all the different collections of water are perfectly distinct from each other, by means of the beds of clay that separate them, each collection becomes so much increased, or accumulated, in the time of heavy rains, that they are filled quite to the level of the surface of the clay by which they are surrounded; when the water getting a free passage, as it would over the edges of a bowl or dish, overflows and saturates the surface of that bed of clay in such a manner, as to render it so perfectly wet and sour, that its produce becomes not only annually more and more scanty, but the soil itself more sterile and unproductive. From the sand-beds, in such cases, having no communication with each other, it must evidently require as many drains as there are beds of this kind, in order fully to draw off the water from each of them. A drain or trench is therefore recommended to be cut from the nearest and lowest part of the field intended to be drained, up to the highest and most distant sand-bank in such a line of direction as, if possible, to pass through some of the intermediate sand-beds, and prevent the labor and expense of making longer cuts on the sides, which would otherwise be requisite.

Where the different beds of sand and clay are of less extent, and lie together with greater regularity, they can be drained in a more easy manner with less cutting, and of course at less expense. Below the layers or beds of sand and clay that lie, in this manner, alternately together, and nearly parallel to each other, is generally a body of impervious clay, which keeps up the water that is contained in the sand, and which, being constantly full, renders the adjacent clay moist; and in wet seasons runs or trickles over

it. As, in these cases, the principal under-stratum of clay is rarely above four or five feet below the surface, a drain is advised to be cut to that depth through the middle of the field, if it have a descent from both sides; but if it decline all to one side, the drain must be made in that place, as the water will more readily discharge itself into it; and unless the field be of great extent, and have more depressions or hollows in it than one, one drain may be quite sufficient for the purpose, as, by crossing the different beds that retain the water, it must take it off from each of them. A principal difficulty in draining ground of this nature, and which renders it impracticable by one drain, is when the direction of the alternate layers, or beds of clay and sand, lie across the declivity of the land, so that one drain can be of no other service than that of conveying away the water after it has passed over the different strata, and would naturally stagnate in the lowest part of the field, if there was no other passage for it. Where the land lies in this way, which is frequently the case, it will therefore be necessary, besides the drain in the lowest part, to have others cut up from it in a slanting direction across the declivity, which by crossing all the different veins, or narrow strata of sand, may be capable of drawing the water from each of them. In forming the drains in these cases, it is recommended that, after laying the bottom in the manner of a sough, or in the way of a triangle, it be filled some way up by small stones, tough sods being applied, the green side downwards, upon them before the mould is filled in. But, where stones cannot be readily procured, faggots may be employed in their place, where they are plentiful: the under part of the drain being laid, or coupled, with stones, so as to form a channel or passage for the conveyance of the water that may sink through the faggots, and for the purpose of rendering them more durable; as where the water cannot get freely off, which is generally the case where there is not an open passage made of some solid material, it must, by its stagnation, soon destroy the faggots, and choke up the drain.

'The mode of draining *retentive* soils, is materially different from that which has been described above. Many tracts of level land are injured by the stagnation of a superabundant quantity of water in the upper parts of the surface materials, which does not rise up into them from any reservoirs or springs below. The removal of the wetness in these cases may, for the most part, be effected without any very heavy expense. From the upper or surface soil, in such cases, being constituted of a loose porous stratum of materials, to the depth of from two to four or five feet, which has a stiff retentive body of clay underneath it, any water that may come upon the surface from heavy rains, or other causes, readily filtrates and sinks down through it, until it reaches the obstructing body of clay which prevents it from proceeding; the consequence of which is, that the porous open soil above is so filled and saturated with water, as to be of little utility for the purpose of producing crops of either grain or grass. Land situated in this way, is frequently said by farmers to be wet-bottomed. In order to remove this kind of wetness, it seldom requires more than a few drains, made according to the situation and extent of the field, of such a depth as to pass a few inches into the clay, between which, and the under surface of the porous earth above, there will obviously be the greatest stagnation, and consequently, collection of water, especially where it does not become much visible on the surface. In these cases there is not any necessity for having recourse to the use of the boring instrument, as there is no water to be discharged from below. When the field to be drained has only a slight declination, or slope, from the sides towards the middle, one drain cut through the porous superficial materials into the clay, in the lowest part of the ground, may be sufficient to bring off the whole of the water detained in the porous soil. This effect may likewise be greatly promoted, by laying out and forming the ridges so as to accord with the direction of the land, and by the use of the plough or spade in removing obstructions, and deepening the furrows. In such situations, where the drain has been formed in this manner, the water will flow into it through the porous surface materials, as well as if a number of small trenches were cut from it to each side, as is the practice in Essex and some other parts of the country; but which is often an unnecessary labor and expense. The drain made in the hollow may frequently serve as a division of the field, in which case it may be open; but in other circumstances it may be more proper to have it covered. Where a field of this description has more than one hollow in its surface, it will obviously be requisite to have more than one main drain; but when it is nearly level, or only inclines slightly to one side, a trench or drain along the lowest part, and the ridges and furrows formed accordingly, may be sufficient for effecting its drainage. There may, however, be cases, as where a field is large and very flat, in which some side-cuts from the principal drain may be necessary, which must be made a little into the clay, and as narrow as they can be wrought, and then filled up with stones or other suitable materials.'

'What is called the *Essex method* of draining in ploughed springy lands, where the surface soil is tenacious, is described by Kent, and consists in substituting small under-drains for open furrows; or in some cases having a small under-drain beneath every other or every third furrow. These drains lead to side or fence ditches, where they discharge themselves.' For draining of mines, see MINING.

Drains may be conveniently classed, as Mr. Loudon observes, under, 1. Drains of conveyance simply; and 2. Drains of conveyance and collection. The most complete drain of conveyance is a large pipe of metal, masonry, or brick-work: and the most complete collecting drain, one formed with a channel built on the sides, and covered with flat-stones, with a superstratum of round stones or splinters, diminishing to the size of gravel as they rise to the surface, and there covered with the common soil. As the best constructions, however, are not always practicable, the following are a few leading sorts

adapted for different situations. (We are indebted to Mr. Loudon for this selection).

For drains of conveyance, there are the walled or box drain, the barrel drain, the walled or the triangular drain, and the arched drain, fig. 1.

Fig. 1.

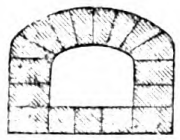
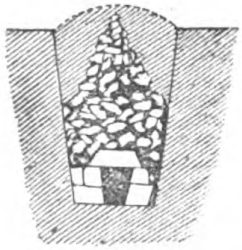


Fig. 2.



Drains of collection are formed of stone, brick, gravel, cinders, wood, spray, straw, turf, and earth alone.

The boxed and rubble drain, fig. 2, is a drain of conveyance and collection. The common rubble drain is formed of rough land-stones of any sort, not exceeding six or seven inches in diameter, thrown in the bottom, with smaller ones over, and, if to be had, gravel or ashes at top. On this is laid a thin layer of straw or haum of any kind, and the remainder is filled up with the surface soil.

The brick drain is formed in a great variety of ways, either from common bricks and bats in imitation of the boxed and rubble, or rubble drain; or by the use of bricks made on purpose, of which there are great variety. Draining tiles to be used with effect as collecting drains, should always be covered a foot in depth, or more, with stones or gravel.

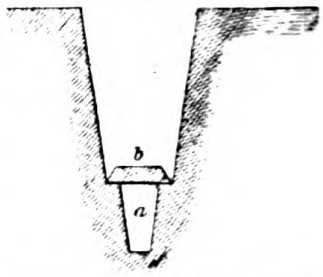
The gravel or cinder drain is seldom made deep, though, if the materials be large, they may be made of any size. In general they are used in grass lands; the section of the drain being an acute-angled triangle, and the materials being filled in, the smallest uppermost, nearly to the ground's surface.

The wood drain is of various kinds. A very sufficient and durable construction consists of poles or young fir-trees stripped of their branches and laid in the bottom of the drain lengthways. They are then covered with the branches and spray. Another form is that of filling the drain with faggot-wood, with some straw over. A variety of this mode is formed by first setting in cross stakes to prevent the faggots from sinking; but they are of no great use, and often occasion such drains to fail sooner than common faggot drains, by the greater vacuity they leave after the wood is rotten. In some varieties of this drain the brush-wood is first laid down alongside the drain, and formed by willow, or other ties, into an endless cable of ten or twelve inches in diameter, and then rolled in, which is said to form an excellent drain with the least quantity of materials, and to last a longer time than any of the modes above mentioned. Some cut the brush-wood into lengths of three or four feet, and place them in a sloping direction with the root end of the branch in the bottom of the drain; others throw in the branches at random, with little preparation, and cover them with spray, straw, or rushes, and finally the surface soil.

The spray drain is generally like the gravel drain, of small size, and formed like it, with an acute angled bottom. In general, the spray is trod firmly in; though in some cases it is previously formed into a cable, as in the brush-wood drain. Drains of this sort are much in use in grass lands, and when the spray of larch-wood, heath, or ling can be got, they are of great durability. The straw drain, when reeds, rushes, and bean straw is used, is sometimes made like the spray drain, by pressing the loose material down, or forming a cable; but in general the straw is twisted into ropes as big as a man's leg, by the aid of a machine, and three or more of these laid in the bottom of a triangular drain, with or without the protection of three turves.

The turf drain, fig. 3, may be made of any convenient depth, but it must be at least the breadth of a turf at bottom. The drain being dug out as if it were to be filled with stones or any ordinary material;

Fig. 3



the operator next, with a spade three inches wide, digs a narrow channel along its centre *a*, clearing it out with the draining scoop; and over this the turves, *b*, are laid without any other preparation, or any thing put over them but the earth that was excavated. This is found to be a very cheap, and, considering the materials, a surprisingly durable method of draining; answering, in pasture-fields especially, all the purposes that the farmer can expect to derive from drains constructed with more labor, and at a much greater expense. They are said to last frequently twenty years and upwards; but the period which it can be supposed they will continue to prove effectual, must depend on the nature of the soil, and the current of water.

The triangular sod drain is thus made: when the line of drain is marked out, a sod is cut in the form of a wedge, the grass side being the narrowest, and the sods being from twelve to eighteen inches in length. The drain is then cut to the depth required, but is contracted to a very narrow bottom. The sods are then set in with the grass side downwards, and pressed as far as they will go. As the figure of the drain does not suffer them to go to the bottom, a cavity is left, which serves as a watercourse; and the space above is filled with the earth thrown out.

The hollow furrow drain is only used in sheep-pastures. Wherever the water is apt to stagnate, a deep furrow is turned up with a stout plough. After this, a man with a spade pares off the loose soil from the inverted sod, and scatters it over the field, or casts it into hollow places. The sod thus pared, and brought to the thickness of about three inches, is restored to its original situation, with the grassy side uppermost, as if no furrow had been made. A pipe or opening is thus formed beneath it, two or three in-

ches deep in the bottom of the furrow, which is sufficient to discharge a considerable quantity of surface water, which readily sinks into it. These furrows, indeed, are easily choked up by any pressure, or by the growth of the roots of the grass; but they are also easily restored, and no surface is lost by means of them.

Pipe drains of turf are sometimes formed where the surface soil is a strong clay, as it is only turves from such a surface that are sufficiently durable. A semicylindrical spade is used to dig the turves, the ground plan of which presents a series of semicircles or half pipes. The drain being dug out to the proper depth, one turf is laid in the bottom, and another being placed over it completes the pipe. The same sort of pipe drain has been formed out of solid beds of clay, and has served for a time to convey water. As collecting drains, of course, they can be of little or no use. This mode of draining appears to have been first practised by Hannah, an ingenious farmer in Wigtonshire. He adopted it for the purpose of conveying water through running sand, in which only a pipe drain will last for a moderate time. After a number of years the clay turves were found effective in conveying away the water, and preventing the running away of the sandy sides of the drain.

DRAKE, *n. s.* Swed. *andrake*, from drake, a male; or duckrake, duck, and Goth. *reke*, a warrior or fighter, says Mr. Thomson; 'from the noise it makes,'—Minsheu. The male of a duck; an old piece of ordnance.

> Two or three shots, made at them by a couple of *drakes*, made them stagger. *Clarendon.*

> Mourn, sooty coots, and speckled teals,
> Ye fisher herons, watching eels;
> Ye duck and *drake*, wi' airy wheels
> Circling the lake. *Burns.*

DRAKE, in ornithology. See ANAS.

DRAKE (Sir Francis), the renowned English admiral, was the son of Edmund Drake, a sailor, and born near Tavistock, in Devonshire, in 1545. He was brought up under the care of Sir John Hawkins, who was his kinsman; and, at the age of eighteen, was purser of a ship trading to Biscay. At twenty, he made a voyage to Guinea; and, at twenty-two, was made captain of the Judith. In that capacity he was in the harbour of St. John de Ulloa, in the gulf of Mexico, where he behaved most gallantly in the actions under Sir John Hawkins, and returned with him to England with great reputation. He next projected a design against the Spaniards in the West Indies; which he no sooner published, than he had volunteers enough ready to accompany him. In 1570 he made his first expedition with two ships; and in 1571 with one only, in which he returned safe, if not with such advantages as he expected. He made another expedition in 1572, wherein he gained considerable booty. In these expeditions he was much assisted by a nation of Indians, who then were engaged in war with the Spaniards. The prince of these people was named Pedro, to whom Drake presented a cutlass from his side, which he saw the chieftain greatly admired. Pedro, in return, gave him four large wedges of gold; which Drake threw into the common stock, saying, 'That he thought it but just that such as bore the charge of so uncertain a voyage on his credit, should share the utmost advantage that voyage produced.' Then, embarking his men with all the wealth he had obtained, which was very considerable, he bore away for England, where he arrived in August, 1573. His success in this expedition, joined to his honorable behaviour towards his owners, gained him a high reputation: and the use he made of his riches, a still greater. For, fitting out three stout frigates at his own expense, he sailed with them to Ireland: where, under Walter, earl of Essex, the father of the famous unfortunate earl (see DEVEREUX), he served as a volunteer. After the death of his noble patron, he returned into England, where Sir Christopher Hatton introduced him to queen Elizabeth. He now proposed a voyage into the South Seas, through the Straits of Magellan, which was what hitherto no Englishman had ever attempted. The project was well received at court: the queen furnished him with means; and his own fame quickly drew together a sufficient force. The fleet with which he sailed, on this extraordinary undertaking, consisted only of five vessels, small when compared with modern ships, and no more than 164 able men. He sailed on the 13th December, 1577: on the 25th fell in with the coast of Barbary, and on the 29th with Cape Verd. On the 13th March he passed the equinoctial, made the coast of Brasil on the 5th April, and entered the river de la Plata, where he lost the company of two of his ships; but meeting them again, and taking out their provisions, he turned them adrift. On the 29th May he entered the port of St. Julian's, where he continued two months, for the sake of laying in provisions; on the 20th August he entered the Straits of Magellan, and on the 25th September passed them, having then only his own ship. On the 25th November he came to Macao, which he had appointed for a place of rendezvous in case his ships separated; but captain Winter, his vice-admiral, having repassed the Straits, returned to England. Thence he continued his voyage along the coasts of Chili and Peru, taking all opportunities of seizing Spanish ships, and attacking them on shore, till his men were sated with plunder; and then, coasting America to the height of 48°, he endeavoured to find a passage that way back into our seas, but could not. However, he landed, and called the country New Albion, taking possession of it in the name of queen Elizabeth; and, having careened his ship, set sail from thence, on the 29th September, 1579, for the Moluccas. He is supposed to have chosen this passage round, partly to avoid being attacked by the Spaniards at a disadvantage, and partly from the lateness of the season, whence dangerous storms and hurricanes were dreaded. On the 13th October he fell in with certain islands inhabited by the most barbarous people he had met with in his voyage: on the 4th November he had sight of the Moluccas; and, coming to Ternate, was well received by the king. On the 10th December he made Celebes, where, the 9th January following, his ship unfortunately ran upon a rock, from which, how-

ever, he got off. On the 16th March he arrived at Java Major, and on the 25th, began to think of returning home. He doubled the Cape of Good Hope on the 15th June, having then on board fifty-seven men, and but three casks of water. On the 12th July he passed the line, reached the coast of Guinea on the 16th, and there watered. On the 11th September he made the island of Tercera, and on the 3d November entered the harbour of Plymouth. This voyage round the world was performed in two years and about ten months. Shortly after his arrival, the queen going to Deptford, went on board his ship, where, after dinner, she conferred on him the order of knighthood, and declared her approbation of all he had done. She likewise gave directions for the preservation of his ship, that it might remain a monument of his own and his country's glory. This celebrated ship, which had been laid up many years at Deptford, at length decaying, it was broke up, and a chair, made out of the planks, was presented to the university of Oxford. In 1585 he sailed with a fleet to the West Indies, and took the cities of St. Jago, St. Domingo, Carthagena, and St. Augustin. In 1587 he went to Lisbon with a fleet of thirty sail; and having intelligence of a fleet assembled in the bay of Cadiz, which was to have made part of the Armada, he with great courage entered that port, and burnt there upwards of 10,000 tons of shipping, which he afterwards merrily called 'burning the king of Spain's beard.' In 1588, when the Armada from Spain was approaching our coasts, Sir Francis Drake was appointed vice-admiral under Charles lord Howard of Effingham, high admiral of England, where fortune favored him as remarkably as ever; for he made prize of a very large galleon, commanded by Don Pedro de Valdez, who was reputed the projector of this invasion; and who surrendered, as soon as he learned it was Drake who summoned him. This Don Pedro remained about two years Sir Francis Drake's prisoner in England; and, when he was released, paid him for his own and his captains' freedom, a ransom of £3,500. Drake's soldiers were well recompensed with the plunder of this ship, for they found in it 55,000 ducats of gold, which were divided among them. In 1589 Sir Francis Drake commanded, as admiral, the fleet sent to restore Don Antonio, king of Portugal; the command of the land forces being given to Sir John Norris: but they were hardly got to sea, before the commanders differed, and so the attempt proved abortive. The war with Spain continuing, a more effectual expedition was undertaken by Sir John Hawkins and Sir Francis Drake, against their settlements in the West Indies, than had hitherto been made during the whole course of it: but the commanders here again not agreeing about the plan, this also did not turn out successfully. All difficulties, before these two last expeditions, had given way to the skill and fortune of Sir Francis Drake; which probably was the reason why he did not bear these disappointments so well as he otherwise would have done. A strong sense of them is supposed to have thrown him into a melancholy, which occasioned a bloody flux; and of this he died on board his own ship, near the town of Nombre de Dios, in the West Indies, on the 28th January, 1595–6. His death was lamented by the whole nation. In the twenty-seventh parliament of queen Elizabeth, he was elected burgess for the town of Bossiney, alias Tintagal, in the county of Cornwall; and for Plymouth in Devonshire, in the thirty-fifth of the same reign. This town had very particular obligations to him: for, in 1587, he undertook to bring water into it, through the want of which, till then, it had been grievously distressed; and he performed it by conducting thither a stream from springs eight miles distant in a straight line; for, in the manner he brought it, the course of it runs upwards of twenty miles.

DRAKE (James), an English physician and author, born at Cambridge in 1667, and educated at that university, where he took his degrees. In 1704 he published a pamphlet, entitled The Memorial of the Church of England, which gave such offence that a proclamation was issued for discovering the author, which obliged him to keep concealed for some time. He was afterwards prosecuted for the publication of a newspaper, entitled Mercurius Politicus; and, although he was acquitted, it is supposed that the vexation threw him into a fever, of which he died in 1707. Besides the above, he published a System of Anatomy, 3 vols. 8vo; a Translation of Herodotus; a play, called the Sham Lawyer, &c.

DRAKE, in geography, a harbour of California, so called after the celebrated Sir Francis Drake, who discovered and took possession of the peninsula.

DRAKENSTEIN, a district in the territory of the Cape of Good Hope. The division which goes by the general name of 'Stellenbosch and Drakenstein' includes a large portion of the Cape territory. See STELLENBOSCH; but the term Drakenstein is peculiarly applied to two beautiful and extensive valleys situated about thirty or forty miles from Cape Town, at the foot of lofty mountains. They are called the valleys of Great and Little Drakenstein, and are to the north-east of the district of Stellenbosch, sheltered by lofty mountains, and watered throughout by the Berg and its minor streams. The subdivision of Little Drakenstein is enclosed by the larger valleys, and the two together supply a large portion of the wine of the Cape. West of this valley is the village of Paarl, surrounded by a fine tract of land, and distinguished by a vast mass of granite, surmounted with a number of large round stones, like the pearls of a necklace. Mr. Anderson, Captain Cook's surgeon, describes it as at least half a mile in circumference, and appearing in its highest part 'to equal the dome of St. Paul's church. It is one uninterrupted mass, or stone,' he adds, 'if we except some fissures, or rather impressions, not above three or four feet deep, and a vein which runs across near its north end. It is of that sort of stone called by mineralogists saxum conglutinatum, and consists chiefly of pieces of coarse quartz and glimmer, held together by a clayey cement. But the vein which crosses it, though of the same materials, is much compacter. This vein

is not above a foot broad or thick, and its surface is cut into little squares or oblongs, disposed obliquely, which makes it look like some artificial work. But I could not observe whether it penetrated far into the large rock or was only superficial.' Cook's Voyages, vol. v. p. 109. The same gentleman described this remarkable stone, at length, in a letter to Sir Joseph Pringle, which is inserted in the Philosophical Transactions, vol. lxviii. part. I. p. 102, and sent home a specimen of it which induced Sir William Hamilton to suppose it to have been raised by a volcanic explosion. Mr. Barrow considers this a perfectly gratuitous assumption, and describes it as of similar materials with the other mountains of the colony, viz. aggregates of quartz and mica; the first in large irregular masses, and the latter in black lumps resembling shorl, mixed with pieces of felspar, and bound together by a clayey iron ore. The pearl and the diamond he speaks of as two distinct central points of the summit, of which the latter is the higher block, and shaped like a cone. The pearl is inaccessible on three sides, and rises about 400 feet from its base on the summit of the mountain, where it measures in circumference, according to this writer, a full mile. The sloping northern side, by which it is ascended, is upwards of 1000 feet in length, and nearly covered with a species of green lichen. Towards the summit it is split by two deep clefts crossing at right angles, in which grow a number of beautiful aloes, and several cryptogamous plants.

In the side of the mountain numerous species of the protea, particularly the mellifera, mingle with the lively green of the wild olive, and the elegant and almost endless tribe of heaths for which the colony is so remarkable, and some of which have here the growth and appearance of considerable trees. The fruit of this olive is too acrid for use, but the wood is close grained, and is said to bear a fine polish. The mellifera yields a saccharine juice in the bottom of its flowers, which is considered as an excellent stomachic by the inhabitants of the district, and is occasionally boiled down with preserves, in the place of sugar. They call it the sugar-tree. The scenery of this spot in the autumn is exquisitely beautiful.

At the north, or upper end of the valley of Drakenstein, are the divisions of Dall Josephat, Waggon-maker's Valley, and Groenberg. The latter being a projecting eminence that bounds the valley northward, and participating in the fruitful character of the surrounding scene. Corn, vines, and fruits adorn its sides,—all of good quality; and the finest peaches and oranges of the colony grow in the two little dales at its feet. Little Drakenstein, the Paarl village, Franche Hook, and the three last subdivisions, northward, embrace all the divisions of this remarkable valley.

The oaks in this valley commonly reach from twenty to thirty feet in height in the stem, and measure from ten to eighteen feet in circumference; many are larger; they appear to grow more freely and naturally in the degree of shelter they here find from the violent winds: the tops are not so bent as in the neighbourhood of Cape Town, nor is the grain of the wood, when cut, so irregular and twisted. The whole valley is well inhabited, so that few wild animals appear in the day-time; but hyenas, wolves and jackals descend from the mountains at night. Game abounds in the thick shrubbery; particularly the düiker (the diver or plunger) and the griesbock or grizzled deer; nor is the steenbok, once so plentiful as to be supposed to have given name to the neighbouring drosdy, wholly driven from the northern hills. The düiker stands about two feet and a half high, and measures upwards of three feet in length; his color is a dusky brown, and the male has black straight horns, about four feet long, and nearly parallel. The female is without horns. The griesbock is rather smaller, and of a grizzled brown color; in every other respect it is of similar appearance with the düiker. Both these animals commit considerable depredations on the young branches of the vine. Hares are numerous in the valley; common and red-winged partridges (which are as tame as poultry) quails, snipes, widgeons, and other species of wild ducks. In the mountains, both northward and eastward, are found the reebock, and the klip-springer, as he is called, or rock-leaper, the fleetest animal, perhaps, and the most formed for agility, of any in the world. His cloven hoofs are each divided into two segments, and jagged at the edges, so that he will adhere, like an insect, to the smoothest and steepest parts of the rocks. His color is a cinereous gray, and his hair is used as the best stuffing for mattrasses, chairs, and saddles. No dog has any chance of keeping up with this animal, but he is easily shot as he leaps from rock to rock. The Paardeberg, or Horse Mountain, and Rickbeck's Casteel or Castle, form a continuation of the Paarl Mountain, northward. Here the zebra, Kolben's 'wild ass,' or horse, formerly abounded; at present neither horses nor cattle are reared here, except for agricultural purposes. See CAPE OF GOOD HOPE.

DRA'MA, *n. s.*
DRAMAT'IC, *adj.*
DRAMAT'ICAL,
DRAMAT'ICALLY, *adv.*
DRAM'ATIST, *n. s.*

Fr. *drame*; Lat. *drama*; Gr. δραμα, a scene, from δραω, to act. A poem representing action, or in which actions are supposed to be carried on, not related. A dramatist is the author of a drama.

Many rules of imitating nature Aristotle drew from Homer, which he fitted to the *drama*; furnishing himself also with observation from the theatre, when it flourished under Æschylus, Euripides, and Sophocles. *Dryden.*

Ignorance and errors are severely reprehended, partly *dramatically*, partly simply. *Id.*

I hope to make it appear, that, in the great *dramatick* poem of nature, is a necessity of introducing a God. *Bentley.*

The whole theatre resounds with the praises of the great *dramatist*, and the wonderful art and order of the composition. *Burnet's Theory.*

There is a kind of *drama* in the forming of a story, and the manner of conducting and pointing it, is the same as in an epigram. *Steele.*

To distress them as nothing human ever was distressed; to deliver them as nothing human ever was delivered, is the business of a modern *dramatist*. *Johnson.*

In short, his idea is to *dramatize* the penal laws, and to make the stage a court of ease to the Old Bailey.
Sheridan.

DRAMA. The drama is, for the greater part, as Dr. Johnson has defined it, an adaptation of poetry to fictitious representation and dialogue. But it is not confined to any single form that language may have assumed. The works of our greatest dramatist are interspersed occasionally with prose; and the sources of the influence of the dramatic art over our minds lie deep in the constitution of our nature. Neither are the scenic representations of our theatres essential to a just perception of the beauties, or a full resignation of the mind to the power, of this inchanting art. They are but the trappings that occasionally adorn, but often impede its progress. Man, in the lowest stages of civilisation, exhibits rude and barbarous attempts to arrive at the pleasure which the drama is calculated to impart. The inhabitants of China, and even of the islands of the South Sea, secluded from the influence of European example, participate in amusements resembling, in species, those of the theatre: and we observe in the earliest pastimes of children, imitations and representations of the conduct of their elders and superiors. They not only indulge in the mimicry of objects immediately before them, but frame out for themselves fancied similitudes of things, of which they can only have very partial knowledge. They 'pipe and they dance;' they 'mourn and they weep,' in early dramas: thus eagerly going out of themselves towards objects which have acquired a hold on the imagination and the heart. The Hindù theatre is extensive and various. Dramas bearing internal and almost indubitable evidence of being at least 500 years old (if not twice that age), could be adduced in proof of the early excellence of the Hindùs in that species of composition.

But it is to ancient Greece and her rhapsodists, tragedians, and comedians, that we must look, historically, for the origin of this art. The modern distinction between the province of the epic and the dramatic poet, was, in the rise of those pursuits, unknown. In the impassioned recitations of the rhapsodist, in the journeyings and declamations of Homer, they were mingled; while, in the orgies of Bacchus, the historians of the dramatic art are accustomed to trace its first distinct appearance. It was customary, at the feasts of this deity, to sacrifice a he-goat, that animal being supposed to be peculiarly obnoxious to the god, in consequence of the injuries the vine received from its bite. On these occasions, religious hymns were chanted in honor of the festive god, and rustic poets and reciters contended for the prize of victory. The compositions, at first produced on these occasions, were merely lyrical. To relieve the singer, however, and vary the gratification of the audience, interlocutors were soon introduced, who filled up the pauses of the song with short narratives of some heroic event. Thespis and Phrynicus added a little to this idea, by making one entire story occupy, in continuation, all the pauses of the song. In consequence of this improvement, the odes became subordinate, in some degree, to the narration, and seemed to interrupt it at intervals. Dialogue, however, was still unknown; and, as far as this is considered essential to the dramatic art, to Æschylus must be given the praise of its invention.

This distinguished poet was born, as it is generally stated, in the 69th, but on better authority, in the 63d Olympiad. Bacchus, it is said, appeared to him in a dream, in his early youth, and commanded him to write tragedies. It is far better established that he was a general in the battle of Marathon, fought in the year before Christ 490; and that he was, like the father of the British drama, Shakspeare, an actor in his own plays. Before his time the Greeks had no regular theatre. The faces of the performers being stained with the lees of wine, they exhibited themselves in the cart of Thespis, a kind of mountebank stage. To this succeeded a theatre of wood; and to that, a more permanent building of stone.

But the improvement of the *chorus*, in the ancient tragedy, was the most important of the alterations which it owed to Æschylus. This consisted of hymns sung in honor of Bacchus, as we have intimated, and constituted, at first, the principal part of the performance. It gradually, however, diminished in importance, as the true character of the drama became developed; but Æschylus first gave it that peculiar and complicated form which is so characteristic of the Greek plays. He found it composed of a body of musicians whose lyrical performances were entirely independent of the incidents of the piece; but he makes them to sympathize with all that is transpiring on the stage, and, in effect, to become the echo of the feelings of the audience. He also divided the chorus, which was formerly directed by a single person, named the Coryphaeus, who frequently spoke or sung alone, into two or more bands, who addressed and replied to each other. 'By this means,' as Sir Walter Scott observes, 'the two unconnected branches of the old Bacchanalian revels were combined together; and we ought rather to be surprised that Æschylus ventured, while accomplishing such a union, to render the hymns sung by the chorus subordinate to the action or dialogue, than that he did not take the bolder measure of altogether discarding that which, before his time, was reckoned the principal object of a religious entertainment.'

The ancient tragedy was principally concerned in the development of some great event, influencing the fortunes of a dynasty, or involving the fate of a nation. Exalted personages, the sport of a luckless destiny, hurled by the gods, or something above the gods, from the pinnacle of their greatness to the depths of wretchedness, gave to the representation a dark and gigantic interest, hurrying the mind irresistibly on through the widest extremes of mortal condition, and surprising the soul with fearful examples of instability in the things on which man relies with the proudest confidence. The modern drama, with more artificial contrivance and intricacy of plot, shakes the mind with quicker alternations of feeling, sustaining and perpetuating its emotions by the anxiety of suspense, the flutter of expectation, and the shock of discovery. The

scale of the theatre among the Greeks was proportioned to the magnificent conceptions of their dramatists, and had stages capable of exhibiting temples and palaces almost in their real magnitude and gigantic proportions. Neither did their decorations consist of tinsel ornaments, which could only glitter amidst a profusion of artificial lights, but were the genuine productions of the finest arts. The great events they celebrated took place beneath the cope of an unclouded sky, with which the scene was formed to harmonise. Neither expence nor labor was spared to make the representation perfect in its minutest circumstances; the mask and the buskin, though totally unsuited to our dramatic style, were the elegant appendages of that of Athens. The chief object to be attained was a magnificent ideal beauty.

Adverting now to the other branch of the art, Epicharmis, who flourished about B. C. 450, is the first name of any consideration in comic dramatic poetry. Philologists and philosophers have given us the derivation of the word κωμωδια, comedy, from κωμη, a 'village,' and have explained the reason for this derivation; but they are unable to inform us who first introduced or invented the characters, the actors, and the prologues. Aristotle here confesses his incapacity: but he ultimately suggests the true allusion of the word κωμωδια, and combats the absurd opinion of its being derived from κωμος, commessatio, 'a revel.' Ως κωμωδους, ηκ απο τη κωμαζειν λεχθεντας αλλα τῃ κατα κωμας πλανη, ατιμαζομενης εκ τη αστεως. 'Comedians were so called from wandering in the κωμας, or villages, when disgracefully expelled from the city.' —*De Poet.* His language would induce us to infer that the comic followers of Thespis were not at all more respectable in the origin of the art, than in the estimation of many of the legislators and moralists of modern times, and ill sustained a comparison with the more dignified character and pursuits of the tragedians. Aristotle does not attempt a definition of comedy. It 'languished' from the first, he observes, 'for, the archon did not, till a late period, allow a chorus of comedians, but formerly they were volunteers;' and only conjectures that as the Iliad and Odyssey formed the materials of tragedy (for Æschylus confesses that his repasts consisted only of fragments from the banquet of Homer), so, in like manner, that the Margites of the bard of Chios bore the same analogy to comedy. What was the precise nature of this work, however, the Greek philosopher does not condescend to tell us; it is understood to have been a ludicrous and satirical poem at the expense of some half-learned pedagogue. The Greek comedy then was of slow progress, and had originally but feeble hold upon the public mind, as compared with the successful efforts of the early tragedians. For the lighter shades of human character, the peculiar levities, the characteristic traits of frivolity, upon which the whole structure of comedy is so dependent, were not observed, because they had not yet been elicited by circumstances, and exist but in a more artificial state of society. Neither comedy nor satire could have found originals to copy nor feelings to work upon in the earlier ages of the world: the whole inhabitants of a district were divided mainly into two classes—those of the artisan and the soldier: and the simplicity and necessities of the one, and the bullying insolence of the other, were almost the only topics upon which the old comedy could descant. There was little subdivision of labor, and no subdivision of character, to furnish the Proteus-shapes of the modern comic muse.

In the old comedy of Greece the illustrious statesmen, generals, and public characters of the commonwealth were brought forward on the stage, and held up to ridicule by name before an applauding audience, until it was deservedly superseded by what is termed the middle comedy, which abolished the chorus, and compelled the poet to substitute for any real personages or characters, in whom he attempted to satirize the vices and follies of the times, disguised or fictitious names. This soon gave way in its turn to the new comedy, having for its object the ludicrous incidents and mortifications of private life. It included also some scenes which call forth pathetic emotion, and approached more nearly to the character of tragedy than had been admitted in the ancient comedies of Aristophanes. An agreeable intermediate species of composition was thus introduced, which became the foundation of the modern drama. The translations of Menander, in Plautus and Terence, give us the only remaining specimens of the new comedy.

Of the Roman tragedy the works of Seneca are the only existing remains. The alterations, indeed, which the Romans made in the dramatic art are of little importance to its history. They lessened the theatres; and the orchestra, or, as we should say, the pit of the theatre was no longer left vacant for the occasional occupation of the chorus, but was filled with senators, knights, and the more respectable citizens. The stage was thus brought more near to the eye of the better class of the audience. But an important revolution was effected among this great people in the rank and estimation in which actors were held. 'The ancient Romans,' says Augustin, 'accounting the art of stage-playing and the whole scene infamous, ordained that this sort of men should not only want the honor of other citizens, but also be disfranchised, and thrust out of their tribe by a legal and disgraceful censure, which the censors were to execute; because they would not suffer their vulgar sort of people, much less their senators, to be defamed, disgraced, or defiled with stage-players;' which act of theirs he calls 'an excellent true Roman prudence, to be enumerated among the Romans' praises.' Individual players, however, it is but just to add, rose to high public estimation. Cicero called the celebrated Roscius his friend; and Paris, the actor, preserved the life of Statius.

It has been admitted on all hands, that the progress of Christianity was unfavorable to the theatre. The primitive Christians regarded it with a double dislike: first, upon the account of its origin, as connected with heathen superstition; and, secondly, for 'the beastly and abominable license practised in the pantomimes, which, although they made no part of the regular drama,

were presented, nevertheless, in the same place, and before the same audience.'—'We avoid your shows and games,' says Tertullian, 'because we doubt the warrant of their origin. They savor of superstition and idolatry; and we dislike the entertainment, as abhorring the heathen religion on which it is founded.' Yet were these exhibitions never formally and legally abolished, even where Christianity became the religion of the state.

The Mysteries of the dark ages, like the orgies of Bacchus, first introduced a species of modern drama, mingled with superstitious rites. 'Whatever name they assumed,' says Sir Walter Scott, they 'were often so unworthy of the Christian religion, on which they were founded, that their being tolerated can be attributed only to the gross ignorance of the laity, and the cunning of the Catholic priesthood, who used them, with other idle and sometimes indecorous solemnities, as one means of amusing the people's minds, and detaining them in contented bondage to their spiritual superiors.' To these succeeded the Moralities, and the Romantic Dramas, cultivated so successfully in the sixteenth century in Spain, and upon the model of which the English drama suddenly arose to comparative perfection in the reigns of queen Elizabeth and James I.

We now, therefore, arrive at the modern distinction between the romantic and the classical drama; and, in the history of our own dramatical productions, these different kinds of composition are most strikingly exemplified.

Shakspeare stands alone and unrivalled among the poets who cultivated the former species. In his hands the art bounded as it were to a sudden and instantaneous perfection;—himself his own legislator and example;—freed from all external influence, and unfettered by any other rules, but those which great minds create for themselves;—and confessedly beyond the reach of imitation, not merely in respect of that poetic genius which carried him into the most sublime and pathless tracks of human thought, but of the form and fabric of his dramas.

The shape and modification of the other class were deduced from the canons of that French criticism which obtained a footing amongst us at the time of the Restoration, and constituted that secondary or reflected Greek tragedy, which, though frequently confounded with the ancient school, is at best but its type or shadow. Primarily, however, it took 'its form and pressure' from the unities, which, originating in a paraphrastic distortion of a passage in Aristotle, have held so despotic an influence over the dramatic writings of France. Its leading attributes are these:—a prologizing development of the story in the shape of a regular narrative recited by a subordinate agent, the immeasurably long speeches of the dialogue, and consequently the absence of rapid and vehement action. Add to this, the predominance of love over the destinies of the personages; a passion, 'according to Dryden, the great apologist of the school,' of such general concernment, that it delights to see its own image in a public entertainment.

Dr. Johnson well remarks upon this subject, 'He that, without diminution of any other excellence, shall preserve all the unities unbroken, deserves the like applause with the architect who shall display all the orders of architecture in a citadel, without any deduction from its strength: but the principal beauty of a citadel is to exclude the enemy; and the greatest graces of a play are to copy nature, and instruct life.'

'The necessity of observing the unities of time and place,' says this great writer in his Preface to Shakspeare, 'arises from the supposed necessity of making the drama credible. The critics hold it impossible, that an action of months or years can be possibly believed to pass in three hours; or that the spectator can suppose himself to sit in the theatre, while ambassadors go and return between distant kings, while armies are levied, and towns besieged, while an exile wanders and returns, or till he whom they saw courting his mistress, should lament the untimely fall of his son. The mind revolts from evident falsehood, and fiction loses its force when it departs from the resemblance of reality.

'From the narrow limitation of time necessarily arises the contraction of place. The spectator, who knows that he saw the first act at Alexandria, cannot suppose that he sees the next at Rome, at a distance to which not the dragons of Medea could, in so short a time, have transported him; he knows with certainty that he has not changed his place, and he knows that place cannot change itself; that what was a house cannot become a plain; that what was Thebes can never be Persepolis.

'Such is the triumphant language with which a critic exults over the miseries of an irregular poet, and exults commonly without resistance or reply. It is time, therefore, to tell him, by the authority of Shakspeare, that he assumes as an unquestionable principle a position, which, while his breath is forming it into words, his understanding pronounces to be false. It is false, that any representation is mistaken for reality; that any dramatic fable, in its materiality, was ever credible, or, for a single moment, was ever credited. The objection arising from the impossibility of passing the first hour at Alexandria, and the next at Rome, supposes, that when the play opens, the spectator really imagines himself at Alexandria, and believes that his walk to the theatre has been a voyage to Egypt, and that he lives in the days of Antony and Cleopatra. Surely he that imagines this may imagine more. He that can take the stage at one time for the palace of the Ptolemies, may take it in half an hour for the promontory of Actium. Delusion, if delusion be admitted, has no certain limitation; if the spectator can once be persuaded that his old acquaintance are Alexander and Cæsar, that a room illuminated with candles is the plain of Pharsalia, or the bank of Granicus, he is in a state of elevation above the reach of reason, or of truth, and, from the heights of empyrean poetry, may despise the circumspections of terrestrial nature. There is no reason why a mind thus wandering in ecstasy should count the clock: or why an hour should not be a century in that calenture of the brain that can make the stage a field. The truth is, that the (judicious) spectators are always in their senses, and know, from the first act to the last, that the

stage is only a stage, and that the players are only players. They come to hear a certain number of lines recited with just gesture and elegant modulation. The lines relate to some action, and an action must be in some place; but the different actions that complete a story may be in places very remote from each other; and where is the absurdity of allowing that space to represent first Athens, and then Sicily, which was always known to be neither Sicily nor Athens, but a modern theatre?

'By supposition, as place is introduced, time may be extended; the time required by the fable elapses for the most part between the acts; for, of so much of the action as is represented, the real and the poetical duration are the same. If, in the first act, preparations for war against Mithridates are represented to be made in Rome, the event of the war may, without absurdity, be represented, in the catastrophe, as happening in Pontus; we know that there is neither war, nor preparation for war; we know, that we are neither in Rome nor Pontus; that neither Mithridates nor Lucullus are before us. The drama exhibits successive imitations of successive actions; and why may not the second imitation represent an action that happened years after the first, if it be so connected with it, that nothing but time can be supposed to intervene? Time is, of all modes of existence, most obsequious to the imagination; a lapse of years is as easily conceived as a passage of hours. In contemplation we easily contract the time of real actions, and therefore willingly permit it to be contracted when we only see their imitation. It will be asked how the drama moves, if it is not credited? It is credited with all credit due to a drama. It is credited, whenever it moves, as a just picture of a real original; as representing to the auditor what he would himself feel, if he were to do or suffer what is there feigned to be suffered or to be done. The reflection that strikes the heart is not that the evils before us are real evils, but that they are evils to which we ourselves may be exposed. If there be any fallacy, it is not that we fancy the players, but that we fancy ourselves unhappy for a moment; but we rather lament the possibility, than suppose the presence of misery, as a mother weeps over her babe, when she remembers that death may take it from her. The delight of tragedy proceeds from our consciousness of fiction; if we thought murders and treasons real, they would please no more.

'Imitations produce pain or pleasure, not because they are mistaken for realities, but because they bring realities to mind. When the imagination is recreated by a painted landscape, the trees are not supposed capable to give us shade, or the fountains coolness; but we consider how we should be pleased with such fountains playing beside us, and such woods waving over us. We are agitated in reading the history of Henry V. yet no man takes the book for the field of Agincourt. A dramatic exhibition is a book recited with concomitants that increase or diminish its effect. Familiar comedy is often more powerful on the theatre than in the page; imperial tragedy is always less. The humor of Petruchio may be heightened by grimace; but what voice or what gesture can hope to add dignity or force to the soliloquy of Cato? A play read affects the mind like a play acted. It is therefore evident, that the action is not supposed to be real, and it follows, that between the acts a shorter or longer time may be allowed to pass, and that no more account of space or duration is to be taken by the auditor of a drama, than by the reader of the narrative, before whom may pass in an hour the life of a hero, or the revolutions of an empire.'

We cannot pursue, in detail, the claims of modern dramatists to distinction. Theatrical performances, and consequently theatrical writings, were from religious motives suspended during the life of Cromwell; but at the accession of Charles, the drama re-appeared with a licentiousness that has scarcely been equalled in any other age or country. No species of literature was more admired, or more debased, than this. Milton had, some years before, in his Comus and Sampson Agonistes, endeavoured to introduce the Grecian model, but his efforts were in vain. The profaneness and nauseous indecency which characterised the dramatical writings of Charles's time had not even the veil of refinement to render them less disgusting. Folly, absurdity, and a dereliction of all the ancient rules of the drama, and even of common sense itself, were visible on every side. From this account little abatement can be made during the remainder of the century.

The celebrated play of the Rehearsal produced indeed some effect; but a more considerable time was required, entirely to change the prepossessions of the age. Even Dryden himself, though a writer of great original powers, was infected with a full proportion of the faults of his cotemporaries. We must not, however, regard, as barren of dramatical genius, a century which began in the life-time of Beaumont, Fletcher, Jonson, and even Shakspeare himself, and which afterwards gave birth to Otway, Lee, Dryden, and others, whose names are still deservedly celebrated in dramatical literature. But, in the eighteenth century, the drama became more regular in its composition, and less openly impure in its language and sentiments. Collier having collected together a variety of offensive passages from the writings of our dramatic authors, the public, not wholly dead to taste and decency, started with displeasure at the disgusting recital, and having perceived the hideousness of such passages in combination, determined no longer to tolerate them in detail. From this time, not even the genius of Congreve could reconcile them to gross impurity; so that, although much, very much, still remains which modesty can by no means approve, we have never reverted to that open licentiousness which our dramatists were at one time accustomed to display. The taste of the eighteenth century was farther evidenced by the rejection of rhyming plays, and a growing admiration for the works of Shakspeare. Bombast of language was no longer confounded with loftiness of idea, nor a series of puns or quibbles mistaken for the festivity of genuine wit.

Modern dramatic poetry may be considered as comprehending tragedy, comedy, and farce.

These are sufficiently distinguished by their general spirit and strain. While pity and terror, and the other strong passions, form the province of the tragic muse, the chief instrument of comedy and farce is ridicule. These last two species of composition are indeed so perpetually running into each other, that they can hardly be distinguished: it is true that what is now known by the name of farce, is too much inclined to the extravagance of ridicule; but the most commendable specimens of this kind of entertainment differ in nothing essential from proper comedy. 'Comedy proposes for its object,' says Dr. Blair, 'neither the great sufferings, nor the great crimes of men; but their follies and slighter vices, those parts of their character which raise in beholders a sense of impropriety, which expose them to be censured and laughed at by others, or which render them troublesome in civil society.

'The subjects of tragedy are not limited to any age or country; but the scene and subject of comedy should always be laid in our own country, and in our own times. The reason is obvious; those decorums of behaviour, those lesser discriminations of character, which afford subject for comedy, change with the differences of countries and times; and can never be so well understood by foreigners as by natives. The comic poet, who aims at correcting improprieties and follies of behaviour, should catch the manners living as they rise. It is not his business to amuse us with a tale of other times; but to give us pictures taken from among ourselves; to satirize reigning and present vices; to exhibit to the age a faithful copy of itself, with its humours, its follies, and its extravagancies.

'Comedy may be divided into two kinds: comedy of character, and comedy of intrigue. The former is the more valuable species; because it is the business of comedy to exhibit the prevailing manners which mark the character of the age in which the scene is laid: yet there should be always as much intrigue as to give us something to wish and something to fear. The incidents should so succeed one another, as to produce striking situations, and to fix our attention; while they afford at the same time a proper field for the exhibition of character. The action in comedy, though it demands the poet's care in order to render it animated and natural, is a less significant and important part of the performance than the action in tragedy; as in comedy it is what men say, and how they behave, that draws our attention, rather than what they perform or what they suffer. In the management of characters, one of the most common faults of comic writers is the carrying of them too far beyond life. Wherever ridicule is concerned, it is indeed extremely difficult to hit the precise point where true wit ends and buffoonery begins. When the miser in Plautus, searching the person whom he suspects of having stolen his casket, after examining first his right hand, and then his left, cries out, Ostende etiam tertiam. Show me your third hand, there is no one but must be sensible of the extravagance. Certain degrees of exaggeration are allowed to the comedian, but there are limits set to it by nature and good taste; and supposing the miser to be ever so much engrossed by his jealousy and his suspicions, it is impossible to conceive any man in his wits suspecting another of having more than two hands.' See POETRY.

DRAMMEN, a town in the government of Christiania, Norway, consisting of two distinct places; Bragernaes and Stromsoe, situated the one on the north and the other on the south bank of the river Drammer, which here discharges itself into the gulph of that name. A brisk traffic is here carried on in timber and iron brought from the interior. The harbour admits only small vessels. Population of the whole place about 6000. Twenty miles south-west of Christiania.

DRANCE, a river of Switzerland, which runs through the lower Valais, and falls into the Rhone. In June, 1818, a dreadful calamity occurred here, from an accumulation of the waters of this river in the narrow valley of Bagnes. The fall of an enormous avalanche, or rather glacier, had blocked up the mouth of the valley, and the waters of the Drance were thus formed into a lake, acquiring additional height daily. The only expedient was to cut a canal through the top of the ice, to stop the farther accumulation of the water. This was accordingly done; and the water, flowing through the channel, fell during some days on the opposite side into the bed of this river, forming a magnificent cascade. On the 16th, however, the accumulated mass burst its narrow bounds, and overwhelming the lower valley, as far as the bed of the Rhine, swept away trees, cottages, and cattle, with a great number of the inhabitants of Champsee and Martigny.

DRAPE, *v. n.* DRA'PER, *n. s.* DRA'PERY, DRA'PET. Fr. *drap*; low. Lat. *drapus*. To make cloth: a draper is he who sells this useful commodity; and drapery cloth-work, and, in a particular sense, woollen cloth-work; hence the cloth itself when made, and the dress made of it. Hence also any kind of flowing dress, robes, or stuff. Drapet is used by Spenser as synonymous with drapery.

Thence she them brought into a stately hall,
Wherein were many tables fair dispred,
And ready dight with *drapets* feastival,
Against the viands should be ministered.
Faerie Queene.

It was rare to set prices by statute; and this act did not prescribe prices, but stinted them not to exceed a rate, that the clothier might *drape* accordingly as he might afford. *Bacon.*

He made statutes for the maintenance of *drapery*, and the keeping of wools within the realm.
Id. Henry VII.

If a piece of cloth in a *draper's* shop be variously folded, it will appear of differing colours.
Boyle on Colours.

The *draper* and mercer may measure her.
Howel.

Poets are allowed the same liberty in their descriptions and comparisons, as painters in their *draperies* and ornaments. *Prior.*

I could wish, for the sake of my country friends, that there was such a kind of everlasting *drapery* to be made use of by all who live at a certain distance from the town, and that they would agree upon such fashions as should never be liable to changes and innovations. *Addison.*

The Bulls and Frogs had served the lord Strutt with *drapery* ware for many years.
Arbuthnot's History of John Bull.

Lights came at length, and men, and maids, who found
An awkward spectacle their eyes before!
Antonio in hysterics, Julia swooned,
Alfonso leaning, breathless, by the door,
Some half-torn *drapery* scattered on the ground,
Some blood, and several footsteps, but no more.
Byron.

DRAPER (Sir William), an English general, born at Bristol, where his father was collector of the customs. He received his education at Eton and King's College, Cambridge, after which he went to the East Indies, where he rose to the rank of colonel. In 1763 he took Manilla, in conjunction with admiral Cornish; but the fort was preserved from plunder, on condition of paying a ransom of 4,000,000 of dollars, which was never discharged. The commander was, however, created a knight of the Bath. In 1769 he was engaged in a controversy with Junius, in defence of his friend the marquis of Granby. In 1769 he was appointed lieutenant-governor of Minorca, and when that place surrendered to the enemy, he brought an accusation against general Murray, the governor, but after his trial general Draper was commanded by the court to make an apology to him. General Draper died at Bath in 1787.

DRA'STICK, *adj.* Δραστικος. Powerful; vigorous; efficacious. It is used of a medicine that works with speed; as jalap, scammony, and the stronger purges.

DRAVE. See DRIVE.

DRAVE, a large navigable river of Germany, which rises in the former archbishopric of Saltzburg, in the Tyrol, runs south-east through Stiria, and, after dividing Hungary from Sclavonia, falls into the Danube at Esseck. Gold is sometimes obtained from its washings.

DRAUGH. See DRAFT.

DRAUGHT, *n. s.*
DRAUGHT-HORSE,
DRAUGHT-HOUSE. } See DRAW.

DRAUGHT, in architecture, or, as it is pronounced, draft, the figure of an intended building described on paper; wherein are laid down, by scale and compass, the several divisions and partitions of the apartments, rooms, doors, passages, conveniences, &c., in their due proportion. It is exceedingly convenient, before a building is begun to be raised, to have draughts of the ichnography, or ground plot, of each floor: as also the form and fashion of each front, with the windows, doors, ornaments, &c., in an orthography, or upright. Sometimes the several fronts, &c., are taken, and represented in the same draught, to show the effect of the whole building: this is called a scenography, or perspective.

DRAUGHT, in medicine. See POTION.

DRAUGHT, in trade, called also cloff or clouch is a small allowance on weighable goods, made by the king to the importer, or by the seller to the buyer, that the weight may hold out when the goods are weighed again. The king allows 1 lb. draught for goods weighing not less than 1 cwt., 2 lbs. for goods weighing between 1 and 2 cwt., 3 lbs. for goods weighing between 2 and 3 cwt., 4 lbs. from 3 to 10 cwt., 7 lbs. from 10 to 18 cwt., 9 lbs. from 18 to 30 or upwards.

DRAUGHT is also used sometimes for a bill of exchange, and commonly for an order for the payment of any sum of money due, &c. The person who gives the order is said to draw upon the other.

DRAUGHT HOOKS, large hooks of iron fixed on the cheeks of a cannon carriage, two on each side, one near the trunnion hole and the other at the train, distinguished by the name of fore and hind. Large guns have draught hooks near the middle transom, to which are fixed the chains that serve to keep the shafts of the limbers on a march. The fore and hind hooks are used for drawing a gun backwards or forwards, by men with strong ropes, called draught ropes, fixed to these hooks.

DRAUGHT HORSE, in farming, a sort of coarse made horse, destined for the service of a cart or plough.

DRAW, *v. a., v. n., & n. s.*
DRAFTMENT, *n. s.*
DRAUGHT, *n. s.*
DRAUGHT'-HORSE,
DRAUGHT'-HOUSE,
DRAW'BACK, *n. s.*
DRAW'BRIDGE,
DRAWEE',
DRAW'ER,
DRAW'ING,
DRAW'ING-ROOM,
DRAW'WELL.

Sax. dragan; Teut. *trecken*, from Lat. *traho*, to pull; i. e. Gr. δραω, to do any thing with violence. See DRAG. To pull in a particular direction, or with force sufficient to overcome resistance: hence to lengthen, to force generally, and to wrest or distort: hence also to attract, to extract, and to protract; to let fluids run; to inspire air; to deduce or derive; to trace in lines, or sketch; and, metaphorically, to form in writing, or compose; to collect; to bring off or away from combat, legal dispute, or friendly contest (thus we speak of a 'drawn' battle, suit, or game); and, literally or metaphorically, to lead, seduce, entice, or persuade; with their consequences, to gain, win, or receive. Of the various prepositions often added to the active verb, to *draw off*, and to *draw up*, seem the only idioms: the one is applied to liquors drained through a vent, and often means to empty, as in the brewhouse; the other, to draw up, is to complete in writing, to compose in a formal manner. We cannot see the propriety of explaining *draw in*, *draw over*, &c., as different senses of the verb, any more than draw away, draw aside, or draw down: they are all but different applications of the same idea. As a neuter verb, to draw signifies to act as a weight or overcoming force, hence as a beast of burden; to adhere, contract, come together; advance towards; to practise delineation; take a lot, or card. As a substantive, 'a draw' is sometimes used for the act of drawing, and a lot, or the thing drawn. Dr. Johnson says, that to draw retains through all its varieties of use some shade of its original meaning, to pull; and expresses 'a gradual, continuous, and leisurely action:' rather, we presume, overcoming force, and whatever time is necessary to make it effectual. Draught is the act or habit of drawing; a thing, quantity, or number drawn; hence, a quantity drunk, a prescribed quantity or dose of medi-

cine; a drain; and the quantity of water necessary to float a vessel; a representation, a picture. A draught-horse is one that habitually draws carriages; a draught-house, a house in which offal, or what is drawn off from general use, is deposited. A draw-back is what is claimed back or against an account, whether by way of discount, abatement of legal dues, or otherwise. A draw-bridge, one that can be withdrawn at pleasure; drawee is explained in the extract; a drawing-room is one into which company withdraws; and a draw-well, one that is furnished with means for drawing up water.

Therfore thei don alle her werkis, that thei be seen of men: for thei *drawen* abrood her falateries and magnyfien hemmes, and thei love the firste placis in soperis, &c. *Wiclif.*

And he wente and *drough* him to oon of the cyteseynes of that cuntre, and he sente him into his toun to feede swyn. *Wiclif. Luk.* xv.

I will *draw* my sword; my hand shall destroy them. *Exodus* xv.

From the hewer of thy wood unto the *drawer* of thy water. *Deut.* xxix. 11.

The liers in wait *draw* themselves along. *Judges* xx. 37.

Draw ye near hither all the chief of the people. 1 *Sam.*

And they brake down the image of Baal, and brake down the house of Baal, and made it a *draughthouse*. 2 *Kings.*

Whatsoever entereth in at the mouth goeth into the belly, and is cast out into the *draught*. *Matt.* xv. 17.

Now *draweth* cutte or that ye for ther turnne;
He which that hath the shortest shal beginne.
Chaucer. Prol. to Cant. Tales.

The Irish will better be *drawn* to the English, than the English to the Irish government. *Spenser on Ireland.*

I conceive the manner of your handling of the service, by drawing sudden *draughts* upon the enemy, when he looketh not for you. *Id.*

Whereas it is concluded, that the retaining diverse things in the church of England, which other reformed churches have cast out, must needs argue that we do not well, unless we can shew that they have done ill: What needed this wrest to *draw out* from us an accusation of foreign churches? *Hooker.*

I wish that both you and others would cease from *drawing* the scriptures to your fantasies and affections. *Whitgifte.*

Go, *draw* aside the curtains, and discover
The several caskets to this noble prince. *Shakspeare.*

Clerk, *draw* a deed of gift. *Id.*

Go, wash thy face, and *draw* thy action: come, thou must not be in this humour with me. *Id.*

The poet
Did feign that Orpheus *drew* trees, stones, and floods;
Since nought so stockish, hard, and full of rage,
But musick, for the time, doth change his nature. *Id.*

For thy three thousand ducats here is six.
——If every ducat in six thousand ducats
Were in six parts, and every part a ducat,
I would not *draw* them, I would have my bond. *Id.*

For his sake
Did I expose myself, pure; for his love
Drew to defend him, when he was beset. *Id.*

What, art thou *drawn* amongst those heartless hinds? *Id.*

There is no more faith in thee than in a stoned prune; no more truth in thee than in a *drawn* fox. *Id.*

I'll raise such artificial sprights,
As by the strength of their illusion
Shall *draw* him on to his confusion. *Id. Macbeth.*

The wine of life is *drawn*, and the mere lees
Are left this vault to brag of. *Id.*

This seems a fair deserving, and must *draw* me
That which my father loses. *Id. King Lear.*

Some blood *drawn* on me would beget opinion
Of my more fierce endeavour. *Id.*

With his other hand, thus o'er his brow,
He falls to such perusal of my face,
As he would *draw* it. *Id. Hamlet.*

Stand in some bye room, while I question my puny *drawer* to what end he gave me the sugar. *Id. Henry IV.*

Ulysses and old Nestor yoke you like *draft* oxen and make you plough up the wair. *Id. Troilus and Cressida.*

In process of time, and as their people increased, they *drew* themselves more westerly towards the Red Sea. *Raleigh.*

Geffrey of Boullion, at one *draught* of his bow, shooting against David's tower in Jerusalem, broached three feetless birds called allerions. *Camden's Remains.*

There was no war, no dearth, no stop of trade or commerce; it was only the crown which had sucked too hard, and now being full, upon the head of a young king, was like to *draw* less. *Bacon's Henry VII.*

We see that salt laid to a cut finger, healeth it; so as it seemeth salt *draweth* blood, as well as blood *draweth* salt. *Bacon.*

I have not yet found certainly, that the water itself by mixture of ashes, or dust, will shrink, or *draw* into less room. *Id. Natural History.*

When the fountain of mankind
Did *draw* corruption, and God's curse, by sin,
This was a charge that all his heirs did bind,
And all his offspring grew corrupt therein. *Sir J. Davies.*

Having the art by empty promises and threats, to *draw* others to his purpose. *Hayward.*

Under colour of war, which either his negligence *draws* on, or his practices procured, he levied a subsidy. *Id.*

The English lords did ally themselves with the Irish, and *drew* them in to dwell among them, and gave their children to be fostered by them. *Davies.*

She had all magnetic force alone,
To *draw* and fasten sundered parts in one. *Donne.*

Let the *drawers* be ready with wine and fresh glasses;
Let the waiters have eyes, though their tongues must be tied. *Ben Jonson's Tavern Acad.*

Half the buildings were raised on the continent, and the other half on an island, continued together by a *drawbridge*. *Carew's Survey of Cornwall.*

One injury *draws* on another. *Bp. Hall. Contemplations.*

The covetous man is a downright servant, a *draught*-horse without bells or feathers. *Cowley.*

Draw out with credulous desire, and lead
At will the manliest, resolutest breast,
As the magnetic hardest iron *draws*. *Milton.*

He ended; and the' archangel soon *drew* nigh,
Not in his shape celestial, but as man
Clad to meet man. *Id. Paradise Lost.*

Thus I called, and strayed I know not whither,
From where I first *drew* air, and first beheld
This happy light. *Id.*

Were it a *draught* for Juno when she banquets,
I would not taste thy treasonous offer. *Milton.*

Have they invented tones to win
The women, and make them *draw in*
The men, as Indians with a female
Tame elephant inveigle the male? *Hudibras*

He affected a habit different from that of the times, such as men had only beheld in pictures, which *drew* the eyes of most, and the reverence of many, towards him. *Clarendon.*

An army was *drawn* together of near six thousand horse. *Id.*

The lord Bernard, with the king's troops, seeing there was no enemy left on that side, *drew up* in a large field opposite to the bridge. *Id.*

He had once continued about nine days without drink, and he might have continued longer, if, by distempering himself one night with hard study, he had not had some inclination to take a small *draught.* *Boyle.*

I took rectified oil of vitriol, and by degrees mixed with it essential oil of wormwood, *drawn over* with water in a limbeck. *Id. on Colours.*

The examination of the subtile matter would *draw* on the consideration of the nice controversies that perplex philosophers. *Id. on Fluids.*

Religion will requite all the honour we can do it, by the blessings it will *draw* down upon us. *Tillotson.*

Upon the *draught* of a pond, not one fish was left, but two pikes grown to an excessive bigness. *Hale.*

From the events and revolutions of these governments, are *drawn* the usual instructions of princes and statesmen. *Temple.*

Several wits entered into commerce with the Egyptians, and from them *drew* the rudiments of sciences. *Id.*

I have cured some very desperate coughs by a *draught* every morning of spring water, with a handful of sage boiled in it. *Id.*

A general custom of using oxen for all sorts of *draught*, would be perhaps the greatest improvement. *Id.*

The brand, amid the flaming fuel thrown,
Or *drew*, or seemed to *draw*, a dying groan.
Dryden's Fables.

Draw out a file, pick man by man,
Such who dare die, and dear will sell their death.
Dryden.

The rest
They cut in legs and fillets for the feast,
Which *drawn* and served, their hunger they appease.
Id.

He has *drawn* a blank, and smiles. *Id.*

A curtain *drawn* presented to our view
A town besieged. *Id. Tyrannic Love.*

So Muley-Zeydan found us
Drawn up in battle, to receive the charge.
Dryden.

Translation is a kind of *drawing* after the life; here every one will acknowledge there is a double sort of a likeness, a good one and a bad. *Id.*

Her pencil *drew* whate'er her soul designed,
And oft the happy *draught* surpassed the image in her mind. *Id.*

With roomy decks, her guns of mighty strength,
Deep in her *draught*, and warlike in her length. *Id.*

In some similes, men *draw* their comparisons into minute particulars of no importance.
Felton on the Classicks.

The first conceit tending to a watch, was a *draw-well:* the people of old were wont only to let down a pitcher with a hand-cord, for as much water as they could easily pull up. *Grew.*

People do not care to give alms without some security for their money; and a wooden leg or a withered arm is a sort of *draftment* upon heaven for those who choose to have their money placed to account there. *Mackenzie.*

Folly consists in the *drawing* of false conclusions from just principles, by which it is distinguished from madness, which *draws* just conclusions from false principles. *Locke.*

When he finds the hardships of slavery outweigh the value of life, 'tis in his power, by resisting his master, to *draw* on himself death. *Id.*

Those elucidations have given rise or increase to his doubts, and *drawn* obscurity upon places of scripture. *Id.*

There may be other and different intelligent beings of whose faculties he has as little knowledge, or apprehension, as a worm, shut up in one *drawer* of a cabinet, hath of the senses or understanding of a man. *Id.*

The Maltese harden the bodies of their children, by making them go stark naked, without shirt or *drawers*, till they are ten years old. *Id.*

I have, in a short *draught*, given a view of our original ideas, from whence all the rest are derived. *Id.*

It was the prostitute faith of faithless miscreants that *drew* them *in*, and deceived them. *South.*

Every *draught*, to him that has quenched his thirst, is but a further quenching of nature; a provision for rheum and diseases. *Id*

A good inclination is but the first rude *draught* of virtue; but the finishing strokes are from the will; which, if well disposed, will by degrees perfect; if ill disposed, will by the superinduction of ill habits quickly deface it. *Id*

Majesty in an eclipse, like the sun, *draws* eyes that would not have looked towards it if it had shined out. *Suckling.*

Philoclea found her, and to *draw out* more, said she, I have often wondered how such excellencies could be. *Sidney.*

Philoclea intreated Pamela to open her grief; who, *drawing* the curtain, that the candle might not complain of her blushing, was ready to speak. *Id.*

In private *draw* your poultry, clean your tripe,
And from your eels their slimy substance wipe.
King.

A man of fire is a general enemy to all waiters, and makes the *drawers* abroad, and his footmen at home, know he is not to be provoked. *Tatler.*

From the soft assaults of love
Poets and painters never are secure:
Can I, untouched, the fair one's passions move,
Or thou *draw* beauty, and not feel its power?
Prior.

Numbered ills, that lie unseen
In the pernicious *draught:* the word obscene,
Or harsh, which, once elanced, must ever fly
Irrevocable, the too prompt reply. *Id.*

His sword ne'er fell but on the guilty head;
Oppression, tyranny, and power usurped,
Draw all the vengeance of his arm upon 'em.
Addison

If we make a *drawn* game of it, or procure but moderate advantages, every British heart must tremble. *Id.*

I shall say nothing of those silent and busy multitudes that are employed within doors in the *drawing* up of writings and conveyances. *Id.*

Such a *draught* of forces would lessen the number of those that might otherwise be employed. *Id.*

While near the Lucrine lake, consumed to death,
I *draw* the sultry air, and gasp for breath,
You taste the cooling breeze. *Id. on Italy.*

They should keep a watch upon the particular bias in their minds, that it may not *draw* too much. *Id. Spectator.*

Authors, who have thus *drawn off* the spirits of their thoughts, should lie still for some time, till their minds have gathered fresh strength, and by reading, reflection, and conversation, laid in a new stock of elegancies, sentiments, and images of nature. *Id. Freeholder.*

Some might be brought into his interests by money; others *drawn over* by fear. *Id. on the War.*

When the engagement proves unlucky, the way is to *draw off* by degrees, and not to come to an open rupture. *Collier.*

Sucking and *drawing* the breast dischargeth the milk as fast as it can be generated. *Wiseman on Tumours.*

opened the tumour by the point of a lancet, without *drawing* one drop of blood. *Id. Surgery.*

In poundage and *drawbacks* I lose half my rent;
Whatever they give me, I must be content. *Swift.*

Love is a flame, and therefore we say beauty is attractive, because physicians observe that fire is a great *drawer*. *Id.*

The report is not unartfully *drawn*, in the spirit of a pleader, who can find the most plausible topicks. *Id.*

They slung up one of their hogsheads, and I drank it off at a *draught*; which I might well do, for it did not hold half a pint. *Gulliver's Travels.*

Spirits, by distillation, may be *drawn* out of vegetable juices, which shall flame and fume of themselves. *Cheyne.*

The arrow is now *drawn* to the head. *Atterbury.*

Why *drew* Marseilles' good bishop purer breath,
When nature sickened, and each gale was death? *Pope.*

Shall Ward *draw* contracts with a statesman's skill? *Id.*

They random *drawings* from your sheets shall take,
And of one beauty many blunders make. *Id.*

What you heard of the words spoken of you in the *drawing-room* was not true: the sayings of princes are generally as ill related as the sayings of wits. *Id.*

Delicious wines the' attending herald brought;
The gold gave lustre to the purple *draught*. *Id. Odyssey.*

Now, sporting muse, *draw* in the flowing reins;
Leave the clear streams awhile for sunny plains. *Gay.*

Batter a piece of iron out, or as workmen call it, *draw* it *out*, till it comes to its breadth. *Moxon.*

With a small vessel one may keep within a mile of the shore, go amongst rocks, and pass over shoals, where a vessel of any *draught* would strike. *Ellis's Voyage.*

The most occasion that farmers have, is for *draught* horses. *Mortimer's Husbandry.*

The joiner puts boards into ovens after the batch is *drawn*. *Id.*

Till rescued from the crowd beneath,
No more with pain to move or breathe,
I rise with head elate, to share
Salubrious *draughts* of purer air. *Shenstone.*

It is sweet to feel by what fine-spun threads our affections are *drawn* together. *Sterne.*

The power of *drawing*, modelling, and using colours, is very properly called the language of art. *Sir J. Reynolds.*

There is a court jargon, a chit-chat, a small talk, which turns singly upon trifles; and which, in a great many words, says little or nothing. It stands fools instead of what they cannot say, and men of sense instead of what they should not say. It is the proper language of levees, *drawing-rooms*, and antechambers. *Chesterfield.*

Compliments of congratulation are always kindly taken, and cost one nothing but pen, ink, and paper. I consider them as *draughts* upon good breeding, where the exchange is always greatly in favour of the *drawer*. *Id.*

As the subtle enemy of mankind takes care to *draw* men gradually into sin, so he usually *draws* them by degrees into temptation. *Mason.*

Just when our *drawing-rooms* begin to blaze
With lights, by clear reflection multiplied
From many a mirror, in which he of Gath
Goliath, might have seen his giant bulk
Whole without stooping, towering crest and all,
My pleasures too begin. *Cowper.*

Here, my friend, are the *drafts* of two deeds, which I wish to have your opinion on.—By one, she will enjoy eight hundred a-year independent while I live; and, by the other, the bulk of my fortune at my death. *Sheridan.*

A bill of exchange is a written order for the payment of a certain sum of money at an appointed time. It is a mercantile contract in which four persons are mostly concerned, viz. 1. The *drawer*, who receives the value. 2. His debtor in a distant place, upon whom the bill is drawn, who is called the *drawee*, and who is to accept and pay it, &c. *Dr. Rees's Cyclopædia.*

DRAWBACK, in commerce, certain duties, either of the customs or of the excise, allowed upon the exportation of some of our own manufactures; or upon certain foreign merchandises, that have paid duty on importation. The oaths of the merchants importing and exporting are required to obtain the drawback on foreign goods, affirming the truth of the officer's certificate on the entry, and the due payment of the duties: and these may be made by the agent of any corporation or company, or by the known servant of any merchant usually employed in making his entries and paying his customs. In regard to foreign goods entered outward, if less quantity or value be fraudulently shipped out than what is expressed in the exporter's certificate, the goods therein mentioned, or their value, are forfeited, and no drawback is allowed. Foreign goods exported by certificate in order to obtain the drawback, not shipped or exported, or relanded in Great Britain, unless in case of distress to save them from perishing, lose the benefit of the drawback, and are forfeited, or their value, with the vessel, horses, carriages, &c., employed in the relanding thereof; and the persons employed in the relanding them, or by whose privity they are relanded, or into whose hands they shall knowingly come, are to forfeit double the amount of the

drawback. Officers of the customs conniving at or assisting in any fraud relating to certificate goods, besides other penalties, are to forfeit their office, and suffer six months' imprisonment without bail or mainprize; as are also masters, or persons belonging to the ships employed therein. Bonds given for the exportation of certificate goods to Ireland must not be delivered up, nor drawback allowed for any goods, till a certificate under the hands and seals of the collector or comptroller, &c., of the customs be produced, testifying the landing. See CUSTOMS.

A DRAWBRIDGE may be made after several different ways; but the most common are made with plyers, twice the length of the gate, and a foot in diameter. The inner square is traversed with a cross, which serves for a counterpoise; and the chains which hang from the extremities of the plyers, to lift up or let down the bridge, are iron or brass. In navigable rivers it is sometimes necessary to make the middle arch of bridges with two moveable platforms, to be raised occasionally, in order to let the masts and rigging of ships pass through. But this contrivance has fallen into disuse before our modern improvements in the construction of bridges.

DRAWING.

DRAWING is the art of representation by picture; or of delineating the appearances of things upon a plain surface, by means of lines, shades, and shadows, formed by various coloring materials. The art of *drawing*, or of delineating the boundaries, outlines, terminations, and forms of figures, may be considered as the basis of painting, and is of the greatest importance to every artist; for it is but labor lost, when the painter endeavours to conceal, by ingenious artifices of color, those details of form which are fundamentally incorrect, and incoherent. It is the groundwork of painting and of sculpture, and is equally essential in architecture.

DRAWING, so called *par excellence*, embraces all the higher qualities of the art, and demands a good eye, a fine taste, and a well-practised hand. It requires a knowledge of pictorial geometry, perspective, anatomy, proportion, both relative and exact, and practice. Sir Joshua Reynolds forcibly calls it, 'an armour, which upon the strong is an ornament and a defence; and upon the weak and mis-shapen, a load.' It leads to a facility in composing, and gives what is called a masterly handling of the chalk or pencil.

By every polished nation the study of this art has, at all times, been held in high esteem:—not only as affording a delightful employment in leisure hours, but from the more important consideration of its influence upon the mind and judgment, by forming the eye, and directing the intellect to habitual discrimination of dimension, regularity, proportion, and order; and we may add, that to those who, either from their birth or unforseen circumstances, are denied a competent portion of the world's wealth, it presents a powerful motive for aspiration after excellence in the arts, which, if it deserve encouragement, rarely misses receiving it. The great masters of all ages are renowned for their skill in drawing, in the study and practice of which they were incessantly sedulous; nor did they cast off the port-crayon on assuming the brush, but first made various sketches of their intended compositions, then a correct finished drawing of the whole, after that larger and more correct drawings of every separate part;—they then painted the picture, and after all retouched and finished the figures from the life.

Among the greatest artists of ancient times, Apelles, surnamed *the prince of painters*, is mentioned by ancient writers as the most eminent for the beauty of his drawing. After the revival of the arts in Italy, Michelangiolo Buonarotti appears to have been the most learned and daring, and Raffaelle the most correct and graceful. The Roman and Florentine schools, indeed, have excelled all others in this fundamental part of the art: of the former, Raffaelle, Guilio Romano, Polydore, and their scholars; and of the latter, Michelangiolo, Leonardo da Vinci, and Andrea del Sarto, have been the most distinguished. In the Bolognese school, the Carraccis, particularly Anibale, whose execution is wonderful, are particularly eminent. In the French school, Poussin, Le Sueur, and Le Brun; and in the English school, omitting living artists, Mortimer, West, Barry, and Gavin Hamilton, demand commendation.

The human figure, as it is the most difficult, should be the first object of the student. To accomplish this, he must begin by acquiring a facile management of his port-crayon and crayon, so as to delineate with correctness the effects of the outline, and of the light and shade of the object which he has before him. When these first rudiments of drawing are obtained, and the student can trace, with sufficient correctness, the elementary parts of the figure, as ears, eyes, hands, &c. (plates II. & IV.), he should then apply to the study of the human figure, after the antique, and after nature, in a philosophical manner.

The different styles of drawing or design may be arranged under the heads of *individual nature*, or that of common or familiar forms, with all the imperfections and peculiarities of the individual model; *select nature*, or that wherein the artist has composed or made a selection from the mass of individual models that he has had before him; and, thirdly, the *grand style*, the gran, gusto of the Italians, the beau ideal of the French, the ideal beauty of the Greeks in which they are so much our masters.

The *individual* style is that in which the Dutch masters, our great Hogarth and Wilkie, and his school, are so excellent. The select style has been ennobled by Raffaelle, and by the Carracci with their eclectic school; and, in the third style, none have surpassed the great sculptors of anti-

quity, particularly those who executed the majestic Apollo Belvedere, and the marvellous works called the Elgin marbles.

The progress of the young artist's studies in drawing or designing, ought to be founded upon a graduated scale. Individual nature, at the commencement of his studies; select, as he proceeds, and, when he attempts originality, idealized according to the precepts of Reynolds, and the practice of Phidias.

Sect. I.—Of the Proper Materials and Instruments for Drawing, and the Manner of Using them.

The first step towards attaining a proficiency in drawing, is the study of geometry and perspective. Geometry is the science of extension, quantity, or magnitude abstractedly considered, and demands the greatest attention from the scientific artist. Perspective is that branch of optics which teaches how to represent objects on a plain surface, in the manner wherein they appear under the peculiarities which arise from distance and height. A knowledge of these two branches of science may be said to form the fundamental part of drawing; and, when beginning, the learner must furnish himself with proper materials and instruments; such as black lead pencils of different degrees of hardness; crayons of black, white, and red chalk; crow or duck-quill pens; Indian ink or seppia: as also with drawing-boards, rules or straight edges, and compasses; drawing-boards for fastening the paper upon, so that it may not shift, and likewise for straining it, to prevent the colors, or the washes of tint, when laid wet upon the paper, from causing it to swell so as to dry uneven. The simplest of these latter requisites is made of a deal board glued together to its proper width and length, strengthened with a piece rabbeted on at each end, to prevent warping. The paper may be fixed down upon this board with pins, wafers, or sealing wax, or it may be strained with paste or glue in the following manner:—First wet the paper well with a sponge, omitting the edges, which should be turned up about half an inch in width on every side; apply a small quantity of good paste or glue all round on the under side, and press the paper down upon the board with a cloth, rubbing it well with your nail, or the smooth handle of a knife to secure it. In the process of drying, the paper, which had expanded and blistered up much when wet, will contract, and (the edges being fixed immoveably) will strain quite flat and tight, and will be much fitter for drawing upon than when loose. But the best drawing boards are made with a frame and a moveable panel, upon which the paper is simply put wet, and then forced into the frame, where it is confined by wedges or keys at the back. This strains equally well, without the trouble of pasting, so that it may be dried at the fire; it also looks better.

The young student must accustom himself to hold the pencil or port-crayon further from the point than he does a pen in writing, which will give him a better command of it, and render his lines or delineations more free and bold.

For Indian ink or seppia drawings, the first outlines are to be sketched in by the black lead pencil, so that any part which is not correct may be easily obliterated by the Indian rubber. When the sketch is as correctly done with the pencil as is in the student's power, he is then to draw carefully his outline with the crow or duck-quill pen, and diluted ink or seppia. After this he is to discharge the pencil lines, by rubbing it gently with the crumb of stale bread or Indian rubber. The pigment used for this purpose is either Indian ink, or seppia, which is a pleasanter warmer color, and softer in execution. By rubbing these up with soft water on a plate, or palette of earthen ware or marble, they may be made of any required degree of strength, and used in the quill or steel pen like common ink.

Having got the outline clear and correct, the next step is to shade the work properly, either by drawing fine strokes with the pen in a manner which is called hatching, and of which the first engravings were imitations, or by washing in the shadows, and softening them into the lights with camel-hair pencils, and tints of Indian ink or seppia. As to the rule and compasses, they are very rarely to be used, except in architectural or geometrical drawings, or in measuring the proportions of figures, after they are drawn, to prove whether they are correct or not; or, finally, in the delineation of fortifications and linear perspective. Chalks and crayons are managed in a similar manner, except that the lights and shades are drawn with the material dry, and hatched and softened into one another, in the same way.

Sect. II.—Of Drawing Lines, Squares, Circles, and other Geometrical Figures.

The first practice of a learner should be to draw straight and curved lines, with ease and freedom, upwards and downwards, inclined to the right and left, or in any required direction. To draw lines inclining to the right, or quite horizontal, he must hold his elbow close to his side as in writing; when perpendicular, the elbow must be removed to about seven inches from the side, and when inclined to the left, at a very considerable distance, according to the degree which the angle forms. A good practice, illustrative of this precept, is for the student to draw by hand a series of equilateral triangles, with a perpendicular line drawn from the apex; and a row of various-formed right angled triangles, with hypothenuses, bases, and perpendiculars of various dimensions. He should also learn to draw by hand, squares, circles, ellipses, and other geometrical figures: for as the alphabet or a knowledge of the letters of a language is an introduction to grammar, so is geometry to drawing.

The practice of drawing these simple elementary figures, till he becomes master of them, will enable him to imitate, with ease and accuracy, many forms both in nature and art, which are composed thereof. Four general precepts or rules may here be laid down: 1. Never let the student be in a hurry, but always make himself master of one figure before he goes on to another; the advantage, and even the necessity of this practice will appear to him as he proceeds. 2. He should accustom himself to draw all his figures

of a considerable size, which is the only method of acquiring a free and bold manner. 3. He should practice drawing till he has gained a tolerable command of his pencil, before he attempts to shade any figure or object of any kind whatever: and, 4. He should not aim at finishing perfectly any single part, before he has sketched out faintly, with light strokes of the pencil, the shape and proportion of the whole figure; correcting it afterwards wherever necessary.

Sect. III.—Of Drawing Eyes, Ears, Flowers, Fruits, Birds, Beasts, &c.

The learner should begin with drawing the outlines of eyes, ears, &c., as in plate II. with noses and parts of faces as in plate III., after either of the modes directed in section I. He may next proceed with flowers, fruits, birds, beasts, and the like; not only as it will be a more pleasing employment to those who do not aim at the severer beauties of the art, but as an easier task, particularly to young ladies, than the drawing of hands and feet, and other parts of the human body, which require not only more care, but greater exactitude and nicer judgment. Very few instructions are necessary upon this head. The best thing that a learner can do is, to furnish himself with good prints or drawings by way of examples, and copy them with great care and exactness. If it is the figure of a beast, let him begin with the forehead, and draw the nose, the upper and under jaw, and stop at the throat. Then he should return to the top of the head, and trace the ears, the neck, and the back; continuing the line till he has given the full shape of the rump and buttock. Then proceed to the chest and breast, mark out the legs and feet, and delineate the belly. And, lastly, as before directed in sect. I., when the learner has acquired some proficiency in the art, let him draw the outline as there instructed, and finish it with shadows, or with the proper colors after nature as directed in section XII. It would not be amiss, by way of ornament, to add a small sketch of a landscape, appropriate to the country of the animal, either by way of a vignette, or determined by a parallelogram like a picture; of these, and other subjects, the learner will find many examples among the plates of this work.

Sect. IV.—Of Drawing Legs, Arms, Hands, Feet, &c.

In the drawing of legs and arms, the learner will have very little more to do than to copy carefully the examples of arms given in plate IV., and of legs in plate V. But the actions and postures of the hands are so many and so various, that no certain rules can be given for drawing them, which will universally hold good. Yet, as the hands and feet are difficult to draw, it is very necessary to bestow some time and pains about them; carefully imitating their various postures and actions, so as not only to avoid all appearance of lameness and imperfection, but also to give them life and spirit. To arrive at this, great care, study, and practice are requisite, particularly in imitating at first, that is before beginning to draw from statues or from nature, the best prints or drawings that can be obtained of hands and feet; examples of which are given in plates IV. and V. As to mechanical rules for delineating them by lines and measures, they are not only difficult and perplexing to the student, but are also contrary to the practice of the best masters. And here the general rule above mentioned must be applied, which is, to sketch out faintly, with light strokes, the general shape and proportion of the whole hand, with its action and turn; and after considering whether this first sketch be perfect, and altering it wherever it may be amiss, to proceed to the bending of the joints, the knuckles, the veins, and other small particulars, which, when the learner has obtained the whole shape and proportions of the hand or foot, will not only be more easily, but also more perfectly drawn.

Sect. V.—Of Delineating Faces.

The head is usually divided into four equal parts, namely, 1. from the crown of the head to the top of the forehead. 2. From the top of the forehead to the eye-brows. 3. From the eye-brows to the bottom of the nose. 4. From thence to the bottom of the chin. But this proportion, as may justly be inferred, is not invariable; these features being, in different men, often very different as to length, breadth, and shape: in a handsome well-turned face, however, it is nearly correct. In delineating a perfect face, therefore, the learner's first business must be to sketch slightly an oval or egg-like figure with its broadest hemisphere upwards; then to bisect it with a perpendicular line from the top to the bottom. Through the middle of this line he will draw a diametral one, directly across from one side to the other of the oval. On these two lines all the features of the face are to be delineated as follows: first divide the perpendicular line into four equal parts, the first of which is to be allotted to the hair of the head; the second is from the top of the forehead to the top of the nose between the eye-brows; the third is from thence to the bottom of the nose; and the fourth includes the lips and chin. The diametral line, or the breadth of the face, is always supposed to be the length of five eyes; it must therefore be divided into five equal parts, and the eyes placed upon it so as to leave exactly the length of one eye between them. This is to be understood only of a full front face as in plate I., for if it turn to either side, the distances are to be lessened on that side which turns from you, more or less in proportion. The top of the ear is to rise parallel to the eye-brows, at the end of the diametral line. The nostrils ought not to come further out than the corner of the eye in any face; and the middle of the mouth must always be placed on the perpendicular line.

Sect. VI.—Of Drawing Human Figures.

When the student is tolerably perfect in drawing faces, heads, hands and feet, he may next attempt to draw the human figure at full length. He should begin by sketching the head; then draw a perpendicular line from the bottom of the head seven times its length, or as many heads as the figure is high from which he is drawing; for in general the length of the head is about one-eighth

part of the length of the figure. The best-proportioned figures of the ancients are seven heads and three quarters in height, but they vary as required by the different characteristics of the figure. If, therefore, the figure stands upright, as fig. A, plate VI., draw a perpendicular line from the top of the head to the heel, which must be divided into two equal parts. The bottom of the belly is exactly the centre of the figure. Then divide the lower part into two equal parts again; the middle of which is to be the middle of the knee.

The method of delineating the upper part of the figure is as follows:—Take off with the compasses the length of the face, which is about three-fourths of the length of the head; then set off the length of another face from the pit of the throat to the pit of the stomach; thence to the navel is another face in length, and thence to the lower rim of the belly is a third.

The entire line must then be divided into seven equal parts: against the end of the first division is the situation of the breasts; the second is the place of the navel; at the third mark out the privities; the fourth comes in the middle of the thigh; the fifth to the lower part of the knee; the sixth to the lower part of the calf; and the seventh to the bottom of the heel; the heel of the leg which supports the body being always under the pit of the throat.

As the essence of all good drawing consists in making a correct sketch at first, the student must be very accurate and careful in this stage of his business, rubbing out and sketching again till he is right in all the bearings and proportions; and finishing no one part perfectly till he finds the general sketch and character of the figure complete and good; and when it is all in, correctly to his mind, he may then proceed to the finishing of one part after another, with all the fidelity in his power.

Some artists, when they have a statue to copy, begin with the head, which they finish, and then proceed in the same manner to the other parts of the figure, perfecting as they go on: but this manner is generally unsuccessful; for, if they make the head in the least too large or too small, the consequence is a manifest disproportion between all the parts, occasioned by their not having sketched the whole proportionably at first. Let the more advanced student therefore remember that, in whatever he intends to draw, he should first sketch its several parts, measuring the distances and proportions between each with his finger or his pencil, without using the compasses, observing the precept of Du Piles 'to bear the compass in his eye,' and then to judge of its general effect by the eye which by degrees will be able to estimate truth and proportion, and will become his principal and best guide. Let him also observe, as a general rule, invariably to begin with the right hand side of the piece he is copying; for thus he will always have what he has done before his eyes, and the rest will follow more naturally and with greater ease. Whereas if he begin with the left side of the figure, his hand and arm will cover what he does first, and deprive him of the sight of it; by which means he will not be able to proceed with so much ease, pleasure, or certainty.

When these more mechanical parts are acquired, and their real measurements tolerably familiar, the student may proceed in respect to the order and manner of drawing the human figure, as follows:—First he should sketch the head; then the shoulders in their exact breadth, in relation to the head; then draw the trunk of the body, beginning with the arm-pits (leaving the arms for an after consideration), and so trace all the beautiful undulations which form the outline of the human body, down the hips on both sides; observing carefully the exact breadth of the waist. Then he should draw that leg upon which the body stands, and afterwards the other which is in repose: then the arms, and last of all the hands. He must carefully notice all the bowings and bendings that are in the figure; making the part which is opposite to that bending inwards correspond to its antagonist by swelling outwards.

For instance: if one side of the body bend in, the other must naturally swell out to be answerable to it: if the back bend in, the belly must swell out; if the knee bend out, the ham must bend in, and so on of every other joint in the body. In a word, he must endeavour to form all the parts of the figure with truth, and in just proportion; not one arm or one leg bigger or less than the other; nor broad Herculean shoulders with a weak and slender waist; nor raw and bony arms with thick and puffy legs; but preserving an harmonious agreement and keeping amongst all the members, and consequently a beautiful symmetry throughout the whole figure. When these rudiments of drawing the human figure are thus acquired, and the student can draw with sufficient correctness, he must next apply himself to its study after the antique and nature in a philosophical manner; studying Osteology and Anatomy as his surest directors. See those articles.

In copying after the antique, which should precede and always accompany that of drawing after nature, the following statues and sculptures are among the master-pieces of ancient art to which the student's attention is particularly directed, as subjects for his studies in chalk drawing or design: namely, first of all the remains of ancient art, those incomparable works known by the name of the Elgin marbles. Of these the figure called Theseus or Hercules, the Ilissus, the Cupid, and the wonderful fragment of the chest and shoulders of Neptune, stand pre-eminent among the naked ones: the colossal statue of Bacchus, the Fates, the Victory, the Canephora, and the Panathenaic procession among the dressed and every one of them—from the Metopes to the fragment of a toe—for various degrees and kinds of perfection in art. They were for more than 700 years the admiration of the ancient world, and, in the time of Plutarch, were regarded as inimitable for their grace and beauty.

The torso of the Belvedere, commonly called the torso of Michelangiolo, as being a considerable favorite with that great master, is another beautiful study for the young artist; as is also the Farnese Hercules, which is a standard master-piece of art. The Apollo Belvedere is

he most sublime of ancient statues, and presents a beautiful subject for the pencil. The Laocoön possesses splendid beauties of another character; and the Venus de Medicis is a perfect model of feminine beauty, grace, elegance, and sweetness, and is indeed the perfection of the female form. The Antinoüs of the Belvedere is a magnificent specimen of male youthful beauty, and the celebrated Gladiators are remarkable for their display of anatomical correctness.

When the student has mastered these, and imbued his mind with their beauties and proportions, he may commence drawing after nature, or from the living model; undertaking a course of anatomy and anatomical drawing, and an occasional return to the beauties of the antique, to prevent a too great mannerism and individuality of form.

Sect. VII.—Of the Proportions and Measures of the Human Body.

The centre, or middle part, between the extremities of the head and feet of a well-proportioned new-born child is in the navel, but that of an adult is in the os pubis; and the practice of dividing the measures of children into four, five, and six parts, of which one is given to the head, is made use of in the way of proportion both by painters and sculptors.

A child of two years of age is in general about five heads high, but, of four or five years old, nearly six; about the fifteenth or sixteenth year, seven heads are the proportion or measure, and the centre declines to the upper part of the pubis. Hence it appears that, as the growth of the body advances, there is a gradual approach to the proportion of an adult of nearly eight heads in the whole height; of which, as before mentioned, the head itself makes one.

Upon these principles the following table is constructed, exhibiting the proportions of a strong, and of a graceful man, and of a fine woman, as given by the ancients, measured from the originals at Rome, and published by J. J. Volpato and Raffaelle Morghen. It is found in Elmes's Dictionary of the Fine Arts. The models are, the Farnese Hercules, the Belvedere Apollo, and the Medicean Venus, which may be classed as the Doric, the Ionic, and the Corinthian orders of human beauty.

PROPORTIONS OF THE	HERCULES		APOLLO.		VENUS.	
	P.	M.	P.	M.	P.	M.
From the beginning of the head to the root of the hairs	3	0	3	0	3	0
From the root of the hairs to the eye-brows, or beginning of the nose	3	0	3	0	3	0
From the eye-brows to the end of the nose	3	0	3	0	3	0
From the end of the nose to the bottom of the chin	3	0	3	0	3	0
From the chin to the articulation of the clavicle with the sternum	6	0	5	1	4	3½
From the clavicle to the end of the breast	9	4	9	3½	10	5
From the end of the breast to the middle of the umbilicus	10	4	10	5½	8	2
From the umbilicus to the symphysis pubis	8	2	7	4½	11	4½
From the symphysis pubis to the middle of the patella	23	3	24	0	18	2
From the middle of the patella to the beginning of the flank	30	1½	28	2	27	3
From the same to the swell of the foot			23	3½		
From the swell of the foot to the bottom of the figure, or to the ground			4	4		
From the patella to the ground					25	3
From the patella to the end of the heel of the right leg	29	2½				
The length of the sole of the foot			14	1½		
The highest part of the foot from the ground	6	1½			3	5½
From the instep to the end of the toes	10	1½			9	0½
From the clavicle or collar-bone to the beginning of the deltoid muscle			9	0	6	3
The length of the whole clavicle on the right side	14	1				
From the clavicle to the nipple	10	4	10	4½	6	0½
From one end of the breast to the other	15	1½	15	0	11	2
The greatest breadth of the trunk, taken a little below the beginning of the thorax	22	4	18	3		
The breadth of the trunk from the end of the breast					15	4½
The narrowest part of the same, taken at the beginning of the flank	19	3½	15	3	15	1
The greatest breadth of the ossa ilei, where the flanks project most	21	1½	16	4	17	5
From the highest part of the deltoid muscle to the end of the biceps			17	0½		
From the beginning of the os humeri to the cubit	22	1½			20	2
From the end of the biceps to the beginning of the hand	15	1½	16	0	14	0
The greatest breadth of the fore arm in front	8	2	4	5	5	0
The greatest breadth of the arm in front	6	1	5	3	4	5
Breadth of the pulse of the arm in front	5	1				
The greatest breadth from one trochanter to the other	22	0	17	5	19	3
The greatest breadth of the thigh in front			9	2½	9	5
The greatest breadth of the left thigh	11	0½				
The greatest breadth of the knee, opposite to the middle of the patella	6	4	5	3½	5	0
The greatest breadth of the calf of the leg	7	5½	6	3½	6	3½
The greatest breadth between the inner and the outer ancle	4	3	4	0½	4	0

PROPORTIONS OF THE	HERCULES.		APOLLO.		VENUS.	
	P.	M.	P.	M.	P.	M.
The narrowest part of the foot	3	5	3	3	3	3
The broadest part of the same	6	4½	5	0	5	1
From the last vertebra of the neck to the lower part of the os sacrum	38	4				
From the end of the os sacrum to the end of the glutæus	6	4				
From the end of the glutæus to the beginning of the gastrocnemius muscle	15	4				
From the beginning of the gastrocnemius muscle to the end of the figure	30	1				

The entire proportions of these celebrated statues are, in round numbers; the Hercules seven heads, three parts, seven minutes (four parts being equal to one head, and twelve minutes equal to one part). The Apollo seven heads, three parts, six minutes; and the Venus seven heads, three parts. The other most admired statues differ a little from these proportions—the Laocoön measuring (if erect) seven heads, two parts, three minutes; the Pyramus seven heads, two parts; the Antinoüs seven heads, two parts; the Grecian shepherdess seven heads, three parts, six minutes; and the Mirmillo eight heads; but all their various proportions are harmonious and agreeable, and in keeping with the characters of the figures they represent.

It is a leading principle, in which every person who is conversant in the arts of design agrees, that, without a perfect knowledge of the proportions of the human figure, nothing can be produced but absurdity and extravagance; and it is also universally admitted, that the ancient Greek and Roman sculptors attained the highest success in producing unexceptionable models.

The greatest modern artists, who have examined these antique statues with attention, admit, that several of the ancient sculptors have, in some degree, surpassed nature, no living man having been found so perfect in every part as some of their figures are. The opportunities for acquiring excellence, which they possessed, were indeed great: Greece abounded with models of beauty, strength, and elegance; and Rome being mistress of the world, every thing beautiful, rich, or curious was brought to it, from all parts. The motives which inspired them and their patrons were also powerful. Religion, glory, and interest, all united in their aid. They considered it a kind of religious duty to give to the figures of their gods so much beauty and grandeur, as to attract at once the love and veneration of the people. Their own glory was also concerned, particular honors being conferred on those who succeeded; and for their fortune they had no farther care to take of that, after arriving at a certain degree of celebrity.

Sect. VIII.—Of the Attitudes of the Human Figure.

If an artist be required to represent a powerful athletic figure, such as a Hercules or a Sampson, in a state of vigorous action, he must pay particular attention to the parts or limbs which are principally exerted in such action. If the figure be standing, the foot must be placed in a right line or perpendicular to the trunk or bulk of the body, so that the centre of gravity may be placed in equilibrio. This point or centre is determined by the heel; or, if the figure be on tiptoe, then the ball of the great toe in the centre. The muscles of the leg which supports the body must be swelled, and their tendons drawn more to an extension than those of the other leg, which is only so placed as to receive the weight of the body like a buttress or a prop, towards that way to which the action inclines it.

For example, suppose Hercules is to be represented, aiming a blow with his club, at something before him, towards his left side. Then must his right leg be placed so as to receive the whole weight of his body, and the left merely touching the ground with the toes. In this case the external muscles of the right leg must be strongly marked; while those of the left leg must be represented more flaccid, and in repose; but, as the foot is extended, the muscles that compose the calf of the leg are extended also, as those of the right are compressed and tumefied. For if the leg or tibia is extended, then the extending muscles are most swelled; but if it be bent, then the bending muscles and their tendons appear most plainly.

The like may be observed of the muscles of the whole figure in general, if it be represented in vigorous action. The Laocoön furnishes an example of this muscular appearance being carried through the whole figure; while in the Antinoüs, the Apollo, the youthful Bacchus, and other figures where no energetic action is expressed, the muscles are expressed but faintly, as they appear through the skin in nature.

The clavicles, or collar bones, and the muscles in general, do not show themselves so strongly in the female as in the other sex, nor in youths as in adults. Nor will any action in which a female uses her utmost strength occasion such risings or indications of the muscles as they do in the stronger sex. The great quantity of fat under the skin of females so clothes their more delicate muscles as to prevent such a marked appearance.

Sect. IX.—Of the Effects of the Exertion of the Muscles.

The most obvious effects of the exertion of those muscles which chiefly demand the attention of the artist are the following: viz.

If either of the mastoid muscles (see the plate of muscles in Anatomy,) act, the head is turned to the contraryside, and the muscle which performs that action appears very plainly through the skin.

If the arms be raised, the deltoid muscles placed on the shoulders, which perform that

action, swell, and make the extremities of the spines of the shoulder blades, called the tops of the shoulders, appear indented or hollow. The shoulder blades following the elevation of the arms, their bases incline at that time obliquely downwards. If the arms be drawn down, put forward, or pulled backwards, the shoulder-blades necessarily vary their positions accordingly. These particulars can only be learned by an attentive study of anatomy and of the living model; by which means the student becoming acquainted with the circumstances which attend every action he will be able to form an idea how they ought to be expressed.

When the cubit or fore-arm is bent, the biceps has its belly very much raised, as shown in the left arm. The like may be observed of the triceps when the arm is extended, as shown in the right arm.

The straight muscles of the abdomen appear very strong when arising from a recumbent posture. Those parts of the great serratus muscle which are received in the beginnings of the oblique descending muscle immediately below, are very much swelled when the shoulder on the same side is brought forwards; the serratus muscle then being in action in drawing the scapula forwards.

The long extending muscles of the trunk act alternately in walking. If the right leg bears the weight of the body, and the left is advancing as on tiptoe, the last-mentioned muscles of the back, on the left side, will be tumefied on the other side about the region of the loins, and so on the other side.

The trochanters, or outward and uppermost heads of the thigh bones, (see the skeleton in the plate of Anatomy,) vary in their positions in such a manner as that no precise observations can explain their several appearances; but a careful study of the living model, placed in action, must be carefully attended to. If either thigh be extended, as when the whole weight of the body rests on that side, the glutæus or buttock-muscle presents a very different appearance from what it offers at another time, or when in repose; but if the thigh be drawn backwards, that muscle becomes still more tumefied.

When the whole leg is drawn upwards and forwards, and at the same time the foot is inclined inwards, the upper part of the sartorius muscle appears, rising very strong. In other positions of the thigh that muscle makes a furrowing appearance in its whole progress.

If a man be on tiptoe, the extending muscles of the leg, which are situated on the fore-part of the thigh and those of the foot, which compose the calf of the leg, appears very strongly, and the long peræous makes a considerable indentation or furrowing at that time in its progress on the outside of the leg. Many other remarks might be made on this subject; but an attentive study of nature will render them unnecessary. Indeed we beg leave to refer the reader for further illustration, to the plates and article Anatomy.

Sect. X.—Of the Effects of the Passions in General.

When the student has thus made himself master of the various attitudes and muscular exertions of the human body, it will be necessary for him next to study the effect of the passions upon the limbs and features. The passions, says Le Brun, are motions of the soul, either upon her pursuing what she judges to be for her good, or shunning what she thinks hurtful; and commonly, whatever causes emotions of passion in the soul, creates also some action in the body. It is therefore necessary for a painter to know which are the different passions of the soul, and how to delineate them.

Le Brun has been extremely happy in delineating many of the passions, and the young artist cannot study any thing better than the examples which he has left us of them; and of which we have given a copy in plate VI. However, as De Piles justly observes, it is absurd, as well as impossible, to pretend to give such particular demonstrations of them, as to fix their expression to certain strokes, which the painter should be obliged to use as essential and invariable rules. This, he very properly says, would be depriving the art of that excellent variety of expression which has no other principle than diversity of imagination, the extent of which is infinite. The same passion may be finely expressed several ways, each yielding more or less pleasure in proportion to the painter's understanding and the spectators' discernment.

Although every part of the face contributes towards expressing the sentiments of the heart, yet the eye-brow is the principal seat of expression, and that wherein the passions principally indicate themselves. It is certain, says Le Brun, that the pupil of the eye, by its fire and motion, very well shows the agitation of the soul, but then it does not express the kind or nature of such an agitation; whereas the motion of the eye-brow differs according as the passions change their nature. To express a simple passion, the motion is simple; to express a mixed passion, the motion is compound: if the passion be gentle, the motion is gentle; and if it be violent, the motion is so too.

We may observe farther, says he, that there are two kinds of elevation in the eye-brows: one, in which the eye-brows rise up in the middle—this elevation expresses agreeable sensations, and it is to be observed that then the mouth rises at the corners: the other, in which the eye-brows rise up at the ends, and fall in the middle; this motion indicates bodily pain, and then the mouth falls at the corners. In laughter, all the parts agree; for the eye-brows, which fall towards the middle of the fore-head, make the nose, the mouth, and the eyes follow the same motion. In weeping, the motions are compound and contrary; for the eye-brows fall towards the nose and over the eyes, and the mouth rises that way. It is to be observed also, that the mouth is the part of the face which more particularly expresses the emotions of the heart: for when the heart complains, the mouth falls at the corners; when it is at ease, the corners of the mouth are elevated, and when it has an aversion, the mouth is protruded and rises in the middle.

'The head,' says De Piles, 'contributes more to the expression of the passions, than all the

other parts of the body put together. Those separately can only show some few passions, but the head expresses them all. Some, however, are more peculiarly expressed by it than others: humility, by hanging it down; arrogance, by lifting it up; languor, by inclining it on one side; and obstinacy, when, with a still and resolute air, it stands upright, fixed, and stiff between the two shoulders. The head also best shows our supplications, threats, mildness, pride, love, hatred, joy, and grief. The whole face and every feature contribute something; especially the eyes, which, as Cicero says, are the windows of the soul. The passions which they more particularly discover are pleasure, languishing, scorn, severity, mildness, admiration, and anger; to which we may add joy and grief, if they did not proceed more particularly from the eye-brows and mouth: but when these two passions fall in also with the language of the eyes, the harmony will be wonderful.

'But though the passions of the soul are most visible in the lines and features of the face, they often require the assistance also of the other parts of the body. Without the hands, for instance, all action is weak and imperfect; motions, which are almost infinite, create numberless expressions: it is by them that we desire, hope, promise, call, send back; they are the expressive instruments of threatening, prayer, horror, and praise; by them we approve, condemn, refuse, admit, fear, ask; express our joy and grief, our doubts, regrets, pains, and admiration. In a word, it may be said, as they are the language of the dumb, that they contribute not a little to speak a language common to all nations, which is the language of painting. But to say how these parts must be disposed for expressing the various passions is impossible, nor can any exact rules be given for it, both because the task would be infinite, and because every one must be guided in this by his own genius and the particular turn of his own studies.'

Sect. XI.—Of the Particular Effects of the different Passions on the Features.

Notwithstanding the justice of the preceding observations of De Piles, yet Le Brun has given such an accurate description of the particular effects of the passions on the human features, as must be of essential service to all who wish to attain proficiency in any of the arts of design. We therefore subjoin it, not only as an illustration of his drawings, copied in plate VI. but as containing a set of general rules to the student for depicting the various passions of human nature.

1. *Attention.*—The effects of attention are to make the eye-brows sink, and approach the sides of the nose; to turn the eye-balls towards the object that causes it; to open the mouth, and especially the upper part; to decline the head a little, and to fix it without any other remarkable alteration. See plate VI, 1.

2. *Admiration.*—Admiration causes but little agitation in the mind, and therefore alters but very little the muscles of the face. Nevertheless the eye-brows rise, the eyes open a little more than ordinary; the eye-balls, placed equally between the eye-lids, appear fixed upon the object: the mouth half opens, but occasions no sensible alteration in the cheeks. Ibid. 2.

3. *Admiration combined with Astonishment.*—The motions that accompany this mixed expression are scarcely different from those of simple admiration; except, that they are more lively and more strongly marked. The eye-brows are more elevated, the eyes more open, the eye-balls removed farther from the lower eye-lid, and more steadily fixed: the mouth more open, and all the muscles in stronger action.

4. *Veneration.*—Admiration begets esteem, and esteem, in a high degree, produces veneration, which, when it has for its object something divine or beyond our comprehension, occasions the face to decline, and the eye-brows to bend downward. The eyes become almost closed and fixed, and the mouth is shut. These motions are gentle, and produce but little alteration in the other parts of the face. Ibid. 3.

5. *Rapture.*—Although rapture has occasionally the same object as veneration, only viewed in a different manner, yet its motions and characteristics are different. The head becomes inclined to the left side, the eye-balls and eye-brows rise directly up; the mouth half opens, and the corners are also a little turned up; while the other parts remain in the natural state. Ibid. 4.

6. *Desire.*—This passion brings the eye-brows together, and protruded towards the eyes, which are more open than ordinary. The eye-balls are inflamed, and place themselves in the middle of the eyes. The nostrils rise up, and contract themselves towards the eyes; the mouth opens, and the spirits, being in motion, give a lively glowing color to the whole countenance. Ibid. 5.

7. *Joy.*—Very little alteration is perceived in the faces of those who feel within themselves the sweetness of this passion, or of joy mixed with tranquillity. The forehead is smooth and serene; the eye-brows without motion, elevated in the middle; the eye pretty open, and with a laughing air; the eye-balls lively and shining; the corners of the mouth turned up a little; the complexion lively, and the cheeks and lips red. Ibid. 6.

8. *Laughter.*—That kind of laughter which is produced by joy mixed with surprise, makes the eye-brows rise towards the middle, and bend towards the nose; the eyes become almost closed, and are sometimes wet with tears, which make no alteration in the face. The mouth, half open, shows the teeth; the corners of the mouth, drawn back, cause a wrinkle in the cheeks, which swell so as to partially close the eyes; the nostrils open, and all the face is of a red color. Ibid. 7.

9. *Acute Pain.*—Acute pain occasions the eye-brows to approach one another, and to rise towards the middle; the eye-balls are concealed under the eye-brows, the nostrils rise and wrinkle the cheeks; the mouth half opens and is drawn back, and all the muscles of the face are agitated in proportion to the violence of the pain. Ibid. 8.

10. *Simple Bodily Pain.*—This degree of suffering produces proportionably the same motions as the last, but in a less violent degree. The eye-brows do not approach so close, nor rise so much; the

eye-balls appear to be fixed upon some object; the nostrils rise, but the wrinkles in the cheeks are less perceptible; the lips are farther apart towards the middle, and the mouth is half open.

11. *Sadness.*—The dejection which is produced by this affection of the mind, makes the eye-brows rise towards the middle of the forehead more than towards the cheeks. The eye-balls appear perturbed, the white of the eye becomes yellowish, the eye-lids are drawn down and a little swelled. All about the eyes becomes livid, the nostrils are drawn downwards, the mouth is half open, its corners being drawn down, the head carelessly droops on one of the shoulders, the face becomes of a heavy color, and the lips pale. Ibid. 9.

12. *Weeping.*—The alterations occasioned in the human countenance by weeping are very evident. The eye-brows sink down towards the middle of the forehead; the eyes are almost closed, and are wet and drawn downwards towards the cheeks. The nostrils swell, the muscles and veins of the forehead appear, the mouth is closed, and the sides thereof are drawn down making wrinkles on the cheeks: the under lip, pushed out, presses the upper one; all the face becomes wrinkled and contracted, and its color is red, especially about the eye-brows, the eyes, the nose, and the cheeks. Ibid. 10.

13. *Compassion.*—That lively attention to the misfortune of others, which is called compassion, causes the eye-brows to sink towards the middle of the forehead; the eye-balls to be fixed upon the object of its attention; the sides of the nostrils next the nose to be a little elevated, forming wrinkles in the cheeks; the mouth to be open; the upper lip to be raised and thrust forwards; the muscles and all the parts of the face to be depressed, and turned towards the object which excites the sentiment. Ibid. 11.

14. *Scorn.*—The motions of this feeling are lively and strong. The forehead becomes wrinkled, the eye-brows knit, the sides of them next the nose sunk down, and the others much risen. The eyes are widely open: and the eye-balls in the middle: the nostrils rise and are drawn towards the eyes, forming wrinkles in the cheeks. The mouth closes, its sides are drawn down, and the under lip is protruded beyond the upper. Ibid. 12.

15. *Horror.*—A despised object sometimes excites horror, and then the eye-brows become knit, and sink considerably more than in the last instance. The eye-balls, placed at the bottom of the eyes, are half covered by the lower eye-lids; the mouth is half open, but closer in the middle than in the sides, which, being drawn backwards, make wrinkles in the cheeks; the face becomes pale, the eyes livid, whilst the muscles and vains are strongly developed. Ibid. 13.

16. *Terror, or Fright.*—The violence of these sensations, which are not synonymous, although Le Brun has so classed them, as the former may be the result of certainty and durable, while the latter is sudden and often evanescent, alter all the middle parts of the face. The eye-brows rise in the centre, their muscles are strongly developed, swoln, pressed against each other, and depressed towards the nose, which is drawn up as well as the nostrils. The eyes are very open, the upper eye-lid hidden by the eye-brow, the white of the eye encompassed with red, the eye-balls fixed toward the lower part of the eye; the lower part of the eye-lids swell and become livid, the muscles of the nose and cheeks enlarge, and the latter terminate in a point towards the sides of the nostrils. The mouth is very open, and its corners become very apparent; the muscles and veins of the neck stretch; the hair stands on end; the color of the face, that is, of the end of the nose, the lips, the ears, and round the eyes, becomes pale and livid; and all the muscles appear strongly marked. Ibid. 14.

17. *Anger.*—The effects of this passion show its nature. The eyes become red and inflamed; the eye-balls staring and sparkling; the eye-brows sometimes elevated, and at others depressed equally; the forehead much wrinkled, as also the space between the eyes. The nostrils open and enlarged; the lips compress, the under one rising over the upper, slightly opens the corners of the mouth, and gives the appearance of a cruel and disdainful grin. Ibid. 15.

18. *Hatred, or Jealousy.*—The expression of the two passions is so very similar that Le Brun classes them together. They wrinkle the forehead, and the eye-brows become depressed and knit; the eye-balls are half hidden under the eye-brows, and turn towards the object of hatred, appearing fiery and animated; the nostrils are pale, open, more marked than ordinary, and drawn backward so as to cause wrinkles upon the cheeks; the lips are so compressed as to show that the teeth are firmly closed; the corners of the mouth are drawn back, and much sunk; the color of the face becomes partly inflamed and partly yellowish, and the lips pale or livid. Ibid. 16.

19. *Despair.*—As despair is extreme, so are its expressions. The forehead becomes wrinkled from the top to the bottom; the eye-brows bend down over the eyes, and press each other on the sides of the nose; the eyes become fiery in their expression and full of blood; the eye-balls are disturbed, and concealed beneath the eye-brows, sparkling and wandering. The eye-lids are swoln and livid, the nostrils large, open and raised. The end of the nose turns down, the muscles, tendons, and veins, become swoln and stretched. The upper part of the cheeks becomes large; the muscles protrude; the mouth drawn backwards is more open at the sides than in the middle; the lower lip swells and turns outwards. The sufferers gnash their teeth, foam and bite their lips, which are pale, as is the rest of the face; the hair becomes straight and stands on end. Ibid. 17.

To these rules the student will do well to add Charles Bell's Anatomy of Expression, published expressly for artists upon the same subject; and, as has been so often insisted on, to pursue an attentive study of nature.

Sect. XII.—Of the Distribution of Light and Shade.

After the student has made himself master, in a tolerable degree, of drawing figures correctly in outline, his next endeavour should

be to shade them properly. It is this portion of the art which gives the desired effect of substance, form, distance, and distinction, to whatever bodies he endeavours to represent, whether animate, or inanimate.

The best rule for performing this is, to consider from what point, and in what direction, the light falls upon the objects which he proposes to delineate; and to make all his lights and shades fall according to that direction throughout the whole work. That part of the object must be lightest which has the light most directly opposed to it. If the light falls obliquely upon the picture, he must make that side which is opposite to the cause the lightest, and that side which is farthest from it the darkest. If he be drawing the figure of a man, and the light is placed above the head, then the top of the head will of course be the lightest, the shoulders will have the next degree of light, and the lower parts be less illumined as they are removed from the cause. That portion of the object, whether the figure be naked or dressed, or whether it be a building which stands farthest out or nearest to the eye, must be made lightest, because it is nearest to the light; which loses so much of its brightness by how much any part of the object recedes; because those parts which project, hinder the lustre and full brightness of the light from striking on the receding parts.

Titian used to say, that he knew no better rule for the distribution of light and shadow, or, as the Italian critics call this department of the art, chiaro-scuro, than the observations that may be drawn from the lights, shadows, and reflexes of a bunch of grapes. Satins and silks, and all other shining stuffs, have certain glancing reflections, exceedingly bright where the light falls strongest. The like is seen in armour, brass pots, or any other glittering metal, where a sudden brightness appears in the centre of the light, which discovers the shining nature of the body depicted. The principal light should be thrown on the principal figure, and an equal balance must be kept between the lights and shades throughout the whole.

The outlines must be faint and almost imperceptible in such parts as receive the light; but where the shades fall the outline may be stronger, but must never be too evident, as there is no such thing as outline in nature. Another effect of nature to be observed is, that as vision becomes weaker by distance, so must the objects appear more or less defined according to the places which they occupy in the picture; those which are very distant, faint and undefined; those which are nearer, and in the foreground, clear, strong, and accurately defined.

However, so much of this important portion of the art depends upon the artist's own feelings and perceptions, that better directions for its acquirement cannot be given, than to study with attention the works of those masters who are reckoned the most successful in its uses, and to follow them and their mistress—nature, as guides.

Sect. XIII.—Of Drapery.

Drapery is the art of clothing figures, and disposing the drapery or clothing properly and elegantly upon them. In this department of the art many things are necessary to be observed. 1. The eye must never be left in doubt as to the object before it; but the shape and proportion of the limb, or portion of the figure, which is covered by the drapery, must appear to be beneath it; or at least so far as art and probability will permit. This is so material a consideration, that the best artists draw the naked figure first, and throw the drapery properly about it afterwards. 2. The drapery must not be too loose about the figure, but should so flow round and adhere to it, that the latter may seem unencumbered and have a free motion. 3. The draperies which cover those parts which are exposed to great light, must not be so deeply shaded as to seem to pierce them, lest by the too great darkness of their shades, the limbs should look as if they were broken. 4. The great folds must be drawn first, and then divided into lesser ones; and great care must be taken that they do not cross one another improperly. 5. Folds in general should be large and few; this must be guided, however, by the quality and quantity of the stuffs of which the drapery is composed. The quality of the persons depicted must also be considered in their drapery; if ancient legislators, orators, or philosophers, their robes should be large and ample; if clowns, countrymen, or slaves, short and of coarse materials; if ladies, or nymphs, light and soft. 6. The garments should be adapted to the body, whose motions they should follow, and the closer the garments sit to the body the narrower and smaller must be the folds. 7. Well-imagined folds give spirit to any kind of action, because their motion implies a motion in the principal limb, which seems to act forcibly upon them, and makes them more or less stirring as the action is more or less violent. 8. An artful complication of folds in a circular manner greatly assists the effects of foreshortening. 9. All folds consist of two shades and no more, which may be turned with the garment at pleasure, shadowing the nearer side deeply and the outer more faintly. 10. The shades in silk and fine linen are very thick and small, requiring little folds, and a light shadow. 11. Observe the motion of the air or wind, in order to draw the loose apparel all flying one way; and draw that part of the garment which adheres closest to the body, before you draw the looser part which flies off from it: lest by drawing the looser part first you should mistake the position of the figure, and thereby place it wrong. 12. Rich ornaments, when judiciously and sparingly used, will sometimes contribute to the beauty of draperies; but such ornaments are below the dignity of heavenly figures, whose grandeur should be derived from their characteristic forms and expressions, whether of countenance, attitude, or attire, rather than from the earthly vanity of rich stuffs or glittering ornaments. 13. Light and flying draperies are proper only to figures in rapid motion, or blown upon by the wind; but in a calm place, and free from violent action, their draperies should be large and flowing; that by their contrast, and the fall of their folds, they may bear the appearance of grace and dignity. See further under Painting.

SECT. XIV.—OF DRAWING LANDSCAPES, BUILDINGS, &c.

Of all the branches of art, this is the most enerally useful and necessary; because it is hat every man may have occasion for at ne time or another. To be able, on the pot, to take the sketch of a fine building, a urious relic of antiquity, or a beautiful prosect of any curious production of art, or uncomon appearance in nature, is not only a desirable ccomplishment, but an agreeable and useful musement. Rocks, mountains, fields, woods, ivers, cataracts, cities, towns, castles, houses, ortifications, ruins, or whatsoever else may preent itself to view on our journeys or travels, in ur own or foreign countries, may be thus brought ome and preserved for future use either in usiness or conversation. On this part, therere, more than ordinary pains should be beowed.

All drawing consists in measuring visible obects accurately with the eye. In order to facilite this operation, the student should fancy, in is own mind, that the subject he is delineating divided into squares of imaginary lines. We ay imaginary lines, because though engravers nd others, who copy with great exactness, ivide both their copy and the original into an qual number of squares, yet this is a method ot to be recommended; since it imposes shackles pon the learner, from which he will find it ifficult to emancipate himself, particularly when e comes to draw from nature, where such artices will not avail him.

When colors are used in drawing, they should e managed with caution and judgment; it being disgusting to see colored or tinted drawings, wherein the reds, greens, and blues are laid on without regard to truth or harmony. It may be urged, by those who execute them, that nothing is greener than grass, nor bluer than the sky; but it should be considered, that nature employs such a multitude of little shadows, and such an endless variety of different tints, intermixed with her broadest colors, that the harshness of the original hue, or local tint, is thereby corrected, and the effect of the whole very different from a raw and unbroken color laid upon white paper.

Though the artist should have recourse to the study of nature, in preference to that of a master, for a knowledge of coloring, yet it requires some judgment to know what part of nature is to be studied, and what to be avoided; in short, selection is necessary. The student, in coloring, should examine with attention, that of old walls, broken and stained by time and weather; old thatch, old tiles, rotten wood;—in short, all objects which are covered with moss, stains, and tints of various kinds; wherein he will find all the principles of the picturesque and agreeable in coloring. Such things as these should be copied with every possible care, and all objects of a decided uniform color should be as carefully avoided. This has ever been the practice of all the great masters who have excelled in this delightful part of the art; and examples of drawing landscapes from nature according to the foregoing precepts have been often given.

To conclude, in order to attain any considerable proficiency in this sort of drawing, a knowledge of PERSPECTIVE is absolutely necessary. See that article.

DRAWING SLATE, in mineralogy, black chalk. s color is grayish black. Massive. Lustre of the rincipal fracture, glimmering; of the cross fracre, dull. Fracture of the former slaty, of the tter fine earthy. Opaque. Streak same color d glistening. Very soft. Sectile. Easily franible. It adheres slightly to the tongue. Spefic gravity 2·11. It is infusible. Its constituents e—silica 64·06, alumina 11, carbon 11, water 2, iron 2·75. It occurs in beds, in primitive d transition clay-slate, also in secondary forations. It is found in the coal formation of cotland, and in most countries. It is used in ayon-painting.

DRAWL, *v. n.* From draw. To utter any ing in a slow, driveling way.

Then mount the clerks, and in one lazy tone
hrough the long heavy page *drawl* on. *Pope.*

Now see him launched into the world at large;
priest, supinely droning o'er his charge,
heir fleece his pillow, and his weekly *drawl*,
hough short, too long, the price he pays for all.
Cowper.

MRS. DAN. Then, I suppose, it must have been r. Dangle's *drawling* manner of reading it to me.
Sheridan.

DRAY, *n. s.*
DRAY'CART,
DRAY'HORSE,
DRAY'MAN,
DRAY'PLOUGH.
Sax. ᵹꞃaȝ, of the same origin as DRAW, which see. The car on which beer is conveyed; the horse attached, and the driver.

A brace of *draymen* bid God speed him well,
And had the tribute of his supple knee. *Shakspeare.*

Have not coblers, *draymen*, and mechanicks governed as well as preached? Nay, have not they by preaching come to govern? *South.*

This truth is illustrated by a discourse on the nature of the elephant and the *drayhorse*. *Tatler.*

Let him be brought into the field of election upon his *draycart*, and I will meet him there in a triumphant chariot. *Addison.*

When *drays* bound high, then never cross behind
Where bubbling yest is blown by gusts of wind.
Gay.

The *drayplough* is the best plough in winter for miry clays. *Mortimer's Husbandry.*

I know too that, if stopped upon my route,
Where the green alleys windingly allure,
Reeling with grapes red waggons choke the way,—
In England 't would be dung, dust, or a *dray*.
Byron.

DRAYTON (Michael), an eminent English poet, born of an ancient family in Warwickshire in 1563. His propensity to poetry was extremely strong from his infancy; and we find most of his principal poems published by the time he was about thirty years of age.—It appears, from his poem of Moses's Birth and Miracles, that he saw at Dover the famous Spanish armada, and it is not improbable that he was engaged in some military employment there. He was patronised by several persons of consequence: particularly by Sir Henry Goodere, Sir Walter Aston,

and the countess of Bedford; to the first of whom he owns himself indebted for a great part of his education, and by the second he was for many years supported. His poems are very numerous and elegant; the most celebrated one is the Poly-Albion, a chorographical description of England, with its commodities, antiquities, and curiosities, in metre of twelve syllables; which he dedicated to prince Henry, by whose encouragement it was written; and, whatever may be thought of the poetry, his descriptions are allowed to be exact. He died in 1631; and was interred in Westminster Abbey among the poets, where his bust is to be seen with an epitaph by Ben Jonson.

DRA'ZEL, *n. s.* Perhaps corrupted from drossel, the scum or dross of human nature; or from Fr. *droslesse*, a whore. A low, mean, worthless wretch.

As the devil uses witches,
To be their cully for a space,
That, when the time 's expired, the *drazels*
For ever may become his vassals. *Hudibras.*

DREAD, *n. s.*, *v. a.* & *v. n.* Sax. dræd, from
DREAD'ER, *n. s.* Goth. *rædur*, ter-
DREAD'FUL, *adj.* ror; or, as Mr.
DREAD'FULLY, *adv.* Todd suggests,
DREAD'FULNESS, *n. s* from Icel. and
DREAD'LESS, *adj.* Goth. *thra*, sad-
DREAD'LESSNESS, *n. s.* ness. Extreme fear, terror, awe; the cause of fear. The verb seems to be derived from the noun, and means to fear in a great degree; to be in fear: a dreader is one who lives in habitual dread: dreadful is terrible: dreadless, without fear or dread: the derivatives correspond in meaning.

And Zacarye seynge was afrayed: and *drede* fel upon him.

And the aungle sayde to him, Zacarye *drede* thou not: for thy preier is herd. *Wiclif.*

Not scruynge at ighe as plesynge to men, but in symplenesse of herte *dredinge* the Lord. *Id. Col.* iii.

The fear of you, and the *dread* of you, shall be upon every beast of the earth. *Genesis* ix. 2.

How *dreadful* is this place! *Genesis.*

Let him be your *dread*. *Isaiah.*

Quod he, to Athenes right now wol I fare;
Ne for no *drede* of deth shal I not spare
To see my lady, that I love and serve;
In hire presence I rekke not to sterve.
Chaucer. Cant. Tales.

Right, faithful, true he was in deed and word;
But of his cheere did seeme too solemne sad;
Yet nothing did he *dread*, but ever was ydrad.
Spenser. Faerie Queene.

Think'st thou that duty shall have *dread* to speak,
When power to flatt'ry bows? To plainness honour
Is bound, when majesty to folly falls.
Shakspeare. King Lear.

It cannot be, but thou hast murthered him;
So should a murtherer look, so *dread*, so grim.
Shakspeare.

The wicked heart never fears God, but thundering or shaking the earth, or raining fire from heaven; but the good can *dread* him in his very sun-shine; his loving deliverances and blessings affect them with awfulness. *Bp. Hall. Contemplations.*

Terrour seized the rebel host,
When, coming towards them, so *dread* they saw
The bottom of the mountains upward turned.
Milton.

From this descent
Celestial virtues rising will appear
More glorious and more *dread* than from no fall.
Id.

The rigid interdiction which resounds
Yet *dreadful* in mine ear. *Id.*

All night the *dreadless* angel, unpursued,
Through heaven's wide champaign held his way
Id.

You may despise that which terrifies others, and which yet all, even those who most *dread* it, must in a little time encounter. *Wake.*

Deaths invisible come winged with fire;
They hear a *dreadful* noise, and straight expire.
Dryden.

Not sharp revenge, nor hell itself, can find
A fiercer torment than a guilty mind,
Which day and night doth *dreadfully* accuse,
Condemns the wretch, and still the charge renews.
Id

Was ever any wicked man free from the stings of a guilty conscience, from the secret *dread* of divine displeasure, and of the vengeance of another world. *Tillotson.*

It may justly serve for matter of extreme terrour to the wicked, whether they regard the *dreadfulness* of the day in which they shall be tried, or the quality of the judge by whom they are to be tried.
Hakewill on Providence.

Zelmane, to whom danger then was a cause of *dreadlessness*, all the composition of her elements being nothing but fiery, with swiftness of desire crossed him. *Sidney.*

Thy love, still armed with fate,
Is *dreadful* as thy hate. *Granville.*

To thee, of all our good the sacred spring;
To thee, our dearest *dread*; to thee, our softer king.
Prior.

I have suspended much of my pity towards the great *dreaders* of popery. *Swift.*

I call upon others to join me in order to make a company apart, but no one will hearken to me. Every one keeps at a distance, and *dreads* the storm that beats upon me from every side. * *
* * * * * * *
Every step I take is with hesitation; and every new reflection makes me *dread* an error and inconsistency in my reasoning. * * * * *
Hume on the Human Understanding.

But slavery!—Virtue *dreads* it as her grave:
Patience itself is meanness in a slave. *Cowper.*

They build each other up with *dreadful* skill,
As bastions set point blank against God's will;
Enlarge and fortify the *dread* redoubt,
Deeply resolved to shut a Saviour out. *Id.*

Rest, ye wild storms, in the cave of your slumbers;
How your *dread* howling a lover alarms!
Wauken, ye breezes, row gently, ye billows,
And waft my dear laddie ance mair to my arms.
Burns.

Too high a sense cannot be entertained of the sacredness of an oath, and of the importance of the judicial office; and the most fatal consequences may be *dreaded* from accustoming jurymen to consider these matters with the profane levity with which their practice proves that they regard them.
Sir S. Romilly.

Look back!
Lo! where it comes like an eternity,
As if to sweep down all things in its track,
Charming the eye with *dread*,—a matchless cataract.
Byron.

Dreadful attraction! while behind thee gapes
The' unfathomable gulf where Ashur lies
O'erwhelmed, forgotten! *Id. on Luxury.*

DREAM, *v. n.*, *v. a.* & *n. s.* } Sax. drom;
DREAM'ER, *n. s.* } Goth. *draumą*;
DREAM'LESS, *adj.* } Belg. *droom*;

Teut. *traum*, from Lat. *dormio*; Heb. רדם, to sleep. To have a representation or imagination of things in sleep: hence, to imagine generally; to think vaguely or idly: as an active verb, to see in a dream. Dreamer has formerly meant an interpreter or master of dreams: dreamless is free from or without dreams. Dr. Johnson observes 'This word is derived by Meric Casaubon, with more ingenuity than truth, from δραμα τυ βιυ, the comedy of life; dreams being, as plays are, a representation of something which does not really happen. This conceit Junius has enlarged by quoting an epigram:

'Σκηνὴ πᾶς ὁ βιος και παίγνιον ἢ μαθε πάιζειν,
Τὴν σπυδὴν μεταθεῖς, ἢ φέρε τὰς ὄδυνας.'

Behold this *dreamer* (Marg. *master of dreams*) cometh! Gen. xxxvii. 19.

Utterly these thinges be no *dremes* ne japes, to throwe to hogges, it is lyfelych mete for children of youth, and as they me betiden whan I pilgramed out of my kith in wintere. *Chaucer.*

We eat our meat in fear, and sleep
In the affliction of those terrible *dreams*
That shake us nightly. *Shakspeare. Macbeth.*

I have long *dreamed* of such a kind of man,
But, being awake, I do despise my dream.
Shakspeare.

These boys know little they are sons to the king,
Nor Cymbeline *dreams* that they are alive. *Id.*

Sometimes he angers me
With telling of the moldwarp and the ant,
Of *dreamer* Merlin, and his prophecies. *Id.*

The savages of Mount Atlas, in Barbary, were reported to be both nameless and *dreamless*.
Camden's Remains.

But, dearest heart! and, dearer image! stay;
Alas! true joys at best are *dreams* enough;
Though you stay here you pass too fast away,
For even at first life's taper is a snuff. *Donne.*

He sleeps but once, and *dreames* of burglarie,
Bp. Hall's Satires, iv. 6.

The Macedon, by Jove's decree,
Was taught to *dream* an herb for Ptolemy.
Dryden.

In *dreams* they fearful precipices tread;
Or shipwrecked, labour to some distant shore. *Id.*

Why does Anthony *dream* out his hours,
And tempts not fortune for a noble day? *Id.*

If our *dreamer* pleases to try whether the glowing heat of a glass furnace be barely a wandering imagination in a drowsy man's fancy, by putting his head into it, he may perhaps be wakened into a certainty.
Locke.

Dreaming is the having of ideas, whilst the outward senses are stopped, not suggested by any external objects, or known occasion, nor under the rule or conduct of the understanding. *Id.*

They *dream* on in a constant course of reading, but never digesting. *Id.*

I *dreamed* that I was conveyed into a wide and endless plain. *Tatler.*

The man of sense his meat devours,
But only smells the peel and flowers;
And he must be an idle *dreamer*,
Who leaves the pie and gnaws the streamer.
Prior.

He never *dreamed* of the deluge, nor thought that first orb more than a transient crust.
Burnet's Theory.

Her midnights once at cards and hazard fled,
Which now, alas! she *dreams* away in bed,
And round her wait shocks, monkeys, and mockaws
To fill the place of fops and perjured beaus. *Gay.*

Life, like their bibles, coolly men turn o'er,
Hence unexperienced children of threescore,
True all men think of course, as all men *dream*;
And if they slightly think, 'tis much the same.
Young.

If we can sleep without *dreaming*, it is well that painful *dreams* are avoided. If, while we sleep, we can have any pleasing *dreams*, it is, as the French say, tant gague, so much added to the pleasure of life. *Franklin.*

With woe I nightly vigils keep,
Beneath thy wan unwarming beam;
And mourn, in lamentation deep,
How life and love are all a *dream*. *Burns.*

It may therefore, perhaps be fairly said, that, in respect of any supposed tendency to scepticism, the evidence of history is full as strong against natural philosophy as against metaphysics; yet who ever *dreamed* of proscribing the natural sciences?
Bowdler.

He came—oh Hope! he hastened to my seat;
I saw, and almost *dreamed* him at my feet,
Close by my side a gay attendant slave;
The glance, which thousands sought, to none he gave.
Dr. T. Brown.

Tell me no more of fancy's gleam,
No, father, no, 'twas not a *dream*;
Alas! the *dreamer* first must sleep,
I only watched, and wished to weep;
But could not, for my burning brow
Throbbed to the very brain as now.
Byron. The Giaour.

DREAMS have been defined as those thoughts of which we are conscious, and those imaginary transactions in which we fancy ourselves engaged, when in the state of sleep. Scarcely any part of nature is less open to our observation than the human mind in this state. The dreamer himself cannot observe the manner in which dreams arise or disappear. When he awakes he has in general but a confused recollection of the circumstances of his dreams. Were we to watch over him with the most vigilant attention, we could not perceive what emotions are excited in his mind, or what thoughts pass through it, during his sleep. But though we could ascertain these phenomena, many other difficulties would still remain. What parts of a human being are active, what dormant, when he dreams? Why does he not always dream while asleep? Or why dreams he at all? Do any circumstances in our constitution, situation, and peculiar character, determine the nature of our dreams?

Without pretending to solve the above questions, we shall here give a brief view of those facts which have been ascertained concerning dreams. 1. In dreaming we are not conscious of being asleep. This is well known from a thousand circumstances. When awake, we often recollect our dreams; and we remember on such occasions,

that, while those dreams were passing through our minds, it never occurred to us that we were separated by sleep from the active world; except in those cases where we have a kind of double dream; i. e. when, after dreaming for some time, we dream that we have awaked from sleep, and told our dream. But during this second dream, and rehearsal of our former one, we are fully persuaded that we are awake, till, by awaking in reality, we are convinced that we were asleep all the time. We are also often observed to act and talk in dreaming, as if we were busily engaged in the intercourse of social life. 2. In dreaming we do not consider ourselves as witnessing or bearing a part in a fictitious scene; we seem not to be in a similar situation with the actors in a dramatic performance, or the spectators before whom they exhibit, but engaged in the business of real life. All the varieties of thought, that pass through our minds when awake, may also occur in dreams; all the images which imagination presents, in the former state, she is also able to call up in the latter; all the same emotions may be excited, and we are often actuated by equal violence of passion; none of the transactions, in which we are capable of engaging while awake, is impossible in dreams; in short, our range of action and observation is equally wide in the one state as in the other; nay often more so; for we may dream of flying, walking upon waters, and performing actions which we cannot perform when awake. 3. It is said that all men are not liable to dream. Dr. Beattie, in a very pleasing essay on this subject, relates, that he knew a gentleman who never dreamed except when his health was in a disordered state; and Locke mentions, that a person of his acquaintance was a stranger to dreaming till the twenty-sixth year of his age; when he began to dream in consequence of having a fever. These instances, however, are too few; and, besides, it does not appear that those persons had always attended, with the care of a philosopher making an experiment, to the circumstances of their sleep. They might dream, but not recollect their dreams on awaking; and they might both dream, and recollect their dreams immediately upon awaking, yet afterwards suffer them to slip out of their memory. But though it is by no means certain that any of the human race are, through the whole of life, absolute stangers to dreaming, yet it is well known that all men are not equally liable to dream. The same person dreams more or less at different times; and, as one person may be more exposed than another to those circumstances which promote this exercise of fancy, one person may therefore dream much oftener than another. The same diversity will naturally take place in this as in other accidents to which mankind are in general liable. 4. Though in dreams imagination appears to be free from all restraint, and indulges in the most wanton freaks, yet it is agreed that the imaginary transactions of the dreamer, if in health, generally bear some relation to his particular character in the world, his habits of action, and the circumstances of his life. The lover dreams of his mistress; the miser of his money; the philosopher renews his scientific researches in sleep with the same assiduity as when awake; and the merchant returns to balance his books, and compute the profits of an adventure, when slumbering on his pillow. And not only do the general circumstances of a person's life influence his dreams, but his passions and habits are nearly the same when asleep as when awake. A person whose habits of life are virtuous does not in his dreams plunge into a series of crimes; nor are the vicious reformed, when they pass into this imaginary world. The choleric man finds himself offended by slight provocations in his dreams, as well as in his ordinary intercourse with the world, and a mild temper continues pacific in sleep. 5. The character of a person's dreams is influenced by his circumstances when awake in a still more unaccountable manner. Certain dreams usually arise in the mind after a person has been in certain situations. Dr. Beattie relates, that he once, after riding thirty miles in a high wind, passed a part of the succeeding night in dreams beyond description terrible. The state of a person's health, and the manner in which the vital functions are carried on, have a considerable influence in determining the character of dreams. After too full a meal, or after eating of an unusual sort of food, a person has dreams of a certain nature. 6. In dreaming, the mind for the most part carries on no intercourse through the senses with surrounding objects. Touch a person gently who is asleep, he feels not the impression. You may awake him by a smart blow; but, when the stroke is not sufficiently violent, he remains insensible of it. We speak softly beside a person asleep without fearing that he will overhear us. His eyelids are shut; and even though light should fall upon the eye-ball, yet still his powers of vision are not awakened to active exertion, unless the light be so strong as to rouse him from sleep. He is insensible both to sweet and to disagreeable smells. It is not easy to try whether his organs of taste retain their activity, without awaking him: yet, from analogy, it may be presumed that these too are inactive. With respect to the circumstances here enumerated, it is indifferent whether a person be dreaming or buried in deep sleep. Yet there is one remarkable fact concerning dreaming which may seem to contradict what has been here asserted. In dreams we are liable not only to speak aloud in consequence of the suggestions of imagination, but some persons even get up and walk about and engage in little enterprises, without awaking. Now, as we are in this instance so active, it seems that we cannot be then insensible of the presence of surrounding objects. The sleep-walker is really sensible, in a certain degree, of the presence of the objects around him; but he does not attend to them with all their circumstances, nor do they excite in him the same emotions as if he were awake. He feels no terror on the brink of a precipice; and, in consequence of being free from fear, he is also without danger in such a situation unless suddenly awoke. This is one of the most inexplicable phenomena of dreaming. There is another fact not quite consonant with what has been above advanced. It is said that, in sleep, a person will continue to hear the noise of a cataract in the neighbourhood, or regular strokes with a hammer, or any similar

sound sufficiently loud, and continued uninterruptedly from before the time of his falling asleep. And it is affirmed that he awakes on the sudden cessation of the noise. This fact is asserted on sufficient evidence: it is curious. Even when awake, if deeply intent on study, or closely occupied in business, the sound of a clock striking in the neighbourhood, or the beating of a drum, will escape us unnoticed; and it is therefore the more surprising that we should thus continue sensible to sounds when asleep. 7. Not only do a person's general character, habits of life, and state of health, influence his dreams; but those concerns in which he has been most deeply interested during the preceding day, and the views which have arisen most frequently to his imagination, very often afford the subjects of his dreams. When one looks forward with anxious expectation towards any future event, he is likely to dream either of the disappointment or the gratification of his wishes. If engaged through the day, either in business or amusements which he found exceedingly agreeable, or in a way in which he has been extremely unhappy, either his happiness or his misery is likely to be renewed in his dreams. 8. Though dreams have been regarded in almost all nations, at least in some periods of their history, as prophetic of future events, yet it does not appear that this popular opinion has been established on good grounds. Christianity, indeed, teaches us to believe that the Supreme Being may operate through this medium, and actually has operated on the human mind; and influenced at time the determinations of the will; as he did to Abimelech, Gen. xx. 3—6, and to Joseph, Matt. i. 20, and ii. 19, 22. The dreams of Joseph and Pharaoh; of his chief butler and baker; of Nebuchadnezzar and the prophet Daniel, &c., are also decisive on this point. Yet it is perfect folly to confound such miraculous dreams with those which the priesthood among heathen nations, or the vulgar among ourselves, have considered as prophetic. We know how easily ignorance imposes on itself, and what arts imposture adopts to impose upon others. We cannot trace any certain connexion between our dreams and those events to which the simplicity of the vulgar pretends that they refer. And we cannot, therefore, join with the vulgar and the superstitious in believing them really referrible to futurity. 9. It appears that brutes are also capable of dreaming. The dog is often observed to start suddenly up in his sleep, in a manner which cannot be accounted for any other way than by supposing that he is roused by some impulse received in a dream. The same thing is observable of other brutes. That they should dream, is not an idea inconsistent with what we know of their economy and manners in general. We may, therefore, consider it as a pretty certain truth that many, if not all, of the inferior animals are liable to dream, as well as human beings. It appears, then, that in dreaming we are not conscious of being asleep; that to a person dreaming, his dreams seem realities: that though it be uncertain whether mankind are all liable to dreams, yet it is well known that they are not all equally liable to dream: that the nature of a person's dreams depends in some measure on his habits of action, and on the circumstances of his life: that the state of the health too, and the manner in which the vital functions are carried on, have a powerful influence in determining the character of a person's dreams: that in sleep, and in dreaming, the senses are either absolutely inactive or nearly so: that such concerns as we have been very deeply interested in during the preceding day, are very likely to return upon our minds in dreams in the hours of rest: that dreams may be rendered prophetic of future events; and therefore, wherever we have such evidence of their having been prophetic as we would accept on any other occasion, we cannot reasonably reject the fact as absurd; but that they do not appear to have been actually such, in those numerous instances in which the superstition of nations, ignorant of true religion, has represented them as referring to futurity, nor in those instances in which they are viewed in the same light by many among ourselves. and, lastly, that dreaming is not a phenomenon peculiar to human nature, but common to mankind with the brutes.

We know of no other facts, that have been ascertained concerning dreaming, besides the above. But we are by no means sufficiently acquainted with this important phenomenon in the history of mind. We cannot tell by what laws of our constitution we are thus liable to be so frequently engaged in imaginary transactions, nor what are the particular means by which the delusion is accomplished. The delusion is indeed remarkably strong. One will sometimes fancy that he reads a book, and actually enter into the nature of the imaginary composition before him, and even remember, after he awakes, what he then knows, that he only fancied himself reading. Another will sometimes dream that he is at church, and hears a sermon delivered, which he would be incapable of composing when awake. Can this be delusion? If delusion, how, or for what purpose, is it produced? The mind, it would appear, does not, in sleep, become inactive like the body; or at least is not always inactive while we are asleep. When we do not dream, the mind must either be inactive, or the connexion between the mind and the body must be considered as in some manner suspended: and when we dream, the mind, though it probably acts in concert with the body, yet does not act in the same manner as when we are awake. It seems to be clouded or bewildered, in consequence of being deprived for a time of the service of the senses. Imagination becomes more active and more capricious; and all the other powers, especially judgment and memory, become disordered and irregular in their operations.

Various theories have been proposed to explain what appears most inexplicable in dreaming. The ingenious Mr. Baxter, in his treatise on the Immateriality of the Human Soul, endeavours to prove that dreams are produced by the agency of some spiritual beings, who either amuse or employ themselves seriously in engaging mankind in all those imaginary transactions with which they are employed in dreaming. This theory, however, is far from being plausible. It leads us entirely beyond the limits of our know-

ledge. It requires us to believe without evidence. It is unsupported by any analogy. It creates difficulties still more inexplicable than those which it has been proposed to remove. Till it appear that our dreams cannot possibly be produced without the interference of other spiritual agents, possessing such influence over our minds as to deceive us with fancied joys, and involve us in imaginary afflictions, we cannot reasonably refer them to such a cause. Besides, from the facts which have been stated as well known concerning dreams, it appears that their nature depends both on the state of the human body and on that of the mind. But were they owing to the agency of other spiritual beings, how could they be influenced by the state of the body? Wolfius, and after him M. Formey, have supposed, that dreams never arise in the mind, except in consequence of some of the organs of sensation having been previously excited. Either the ear or the eye, or the organs of touching, tasting, or smelling, communicate information somehow, in a tacit, secret manner; and thus partly rouse its faculties from the lethargy in which they are buried in sleep, and engage them in a series of confused and imperfect exertions. But what passes in dreams is often so very different from all that we do when awake, that it is impossible for the dreamer himself to distinguish whether his powers of sensation perform any part on the occasion. It is not necessary that imagination be always excited by sensation. Fancy, even when we are awake, often wanders from the present scene. Absence of mind is incident to the studious: the poet and the mathematician often forget where they are. We cannot discover from any thing that a person in dreaming displays to the observation of others, that his organs of sensation take a part in the imaginary transactions in which he is employed. In those instances, indeed, in which persons asleep are said to hear sounds, the sounds which they hear are also said to influence, in some manner, the nature of their dreams. But such instances are singular. Since it then appears, that the person who dreams is himself incapable of distinguishing, either during his dreams or by recollection when awake, whether any new impressions are communicated to him in that state by his organs of sensation; that even by watching over him, and comparing our observations of his circumstances and emotions, in his dreams, with what he recollects of them after awaking, we cannot, except in one or two singular instances, ascertain this fact; and that the mind is not incapable of acting while the organs of sensation are at rest, and on many occasions refuses to listen to the information which they convey; we may conclude, that the theory is groundless. Other physiologists tell us, that the mind, when we dream, is in a state of delirium. Sleep, they say, is attended with what is called a collapse of the brain; during which either the whole or a part of the nerves of which it consists, are in a state in which they cannot carry on the usual intercourse between the mind and the organs of sensation. When the whole of the brain is in this state, we become entirely unconscious of existence, and the mind sinks into inactivity; when only a part of the brain is collapsed, we are then neither asleep nor awake, but in a sort of delirium between the two. This theory, like the last, supposes the mind incapable of acting without the help of sensation: it supposes that we know the nature of a state, of which we cannot ascertain the phenomena; it also contradicts a known fact, in representing dreams as confused images of things around us, not fanciful combinations of things not existing together in nature or in human life. We must treat it likewise, therefore, as a baseless fabric. In the second edition of the Encyclopædia Britannica, a theory different from any of the foregoing was advanced. It was observed, that the nervous fluid, which is supposed to be secreted from the blood by the brain, appears to be likewise absorbed from the blood by the extremities of the nerves. It was argued that, as this fluid was considered as the principle of sensibility, therefore, in all cases in which a sufficient supply of it was not absorbed from the blood by the extremities of the nerves, the parts of the body to which those nerves belonged must be, in some degree, deprived of sensation. From these positions it was inferred, that, as long as impressions of external objects continue to communicate a certain motion from the sentient extremities of the nerves to the brain, so long we continue awake; and that, when there is a deficiency of this vital fluid in the extremities of the nerves, or when from any other cause it ceases to communicate to the brain the peculiar motion alluded to, we must naturally fall asleep, and become insensible of our existence. It followed that, in sleep, the nervous fluid between the extreme parts of the nerves and the brain must either be at rest, or be deficient, or be prevented by some means from passing into the brain; and it was concluded, that whenever irregular motions of this fluid were occasioned by any internal cause, dreaming was produced. Thus we might be deceived with regard to the operation of any of the senses; so as to fancy that we see objects not actually before us: that we hear sounds; that we taste, feel, smell, &c. The instances of visions which will sometimes arise, and as it were swim before us when awake, though our eyes be shut; the tinnitus aurium, which is often a symptom in nervous diseases; and the strange feelings in the case of the amputated limb, were produced in proof of this theory, and applied to confirm it.

Plausible as the above theory at first view may appear, it is not satisfactory. It is too much founded on supposition. The nature of the nervous fluid is but imperfectly known, and even its existence is not fully ascertained. All theories founded upon it must, therefore, be at best uncertain. Besides the suppositions made in this theory, of a partial privation and sensation, and efficiency of the vital fluid, as necessary to produce sleep, seem to infer that sleep is not consistent with a state of perfect health, which every body knows is contrary to fact. The Brunonian system of medicine appears to give rather a more satisfactory solution of the phenomena and causes of sleep, by ascribing them to the exhaustion of the excitability by the exciting powers. But, without trusting entirely to the

hypotheses of either system, we are persuaded, a theory of dreaming, if not perfectly satisfactory, at least less exceptionable than any of the above, may be drawn from merely attending to a simple fact that frequently takes place when we are awake. Every person must have observed, that when alone, and while his attention is not called to any particular subject, either by study, conversation, manual labor, sudden noise, or the objects around him, a kind of involuntary motion, so to speak, will take place in his ideas; and that, if he makes no voluntary exertion of mind to fix his attention upon one idea more than another, a rapid succession of very different ideas, some old and some recent, will occur in the course of a few minutes. Every person, who attends church regularly, or who has attended the lectures of an unentertaining public speaker, must be sensible, that such involuntary motions of his ideas have often taken place, when, either through the fault of the speaker, or that of the hearer, his attention has not been sufficiently fixed upon what was spoken. A person much addicted to study, and to the habit of fixing his ideas constantly upon one subject or another, may, perhaps, be less sensible of the involuntary motion we here allude to, than others; but let such a studious person be placed in a company where a trifling conversation is going on, and he will soon find himself in the situation here described. A current of ideas will rapidly intrude upon his mind, and carry off his attention from the trifles in which those around him are engaged; and thus subject him to what is commonly called absence of mind. And it will also be admitted that the most studious, as well as the most thoughtless, will sometimes find an idea of a long forgotten fact, sentiment, or circumstance, suddenly recurring to their minds, without any seeming cause. The inference we would draw from all these facts, to our present subject, is, that during sleep, a similar involuntary motion, or current of ideas, takes place; but that, in consequence of the fatigue occasioned by the labors of the day (no matter whether these operate by exhausting the excitability, or by occasioning a deficiency of the nervous fluid), the three chief powers of the mind—the will, the judgment, and the memory, are rendered in a considerable degree inactive; at least, in so far, that the will has no power over these faculties, while the imagination, rendered more active, as it would seem, by being freed from the control of both the will and the judgment, gives every new idea that occurs a visionary form; and thus creates a fresh and rapid succession of various images, according to the unlimited current of uncontrolled ideas that succeed each other. How this happens, perhaps, the human faculties will never be able to comprehend or explain; at least, till they shall be capable of explaining the connexion by which the soul and body are united, if, indeed, mankind shall ever attain to such a degree of perfection in physiology. But that dreams take their rise chiefly, if not solely, from the mere succession of ideas, dressed into form by the imagination, uncontrolled by the will or the judgment, appears to us to be an undoubted fact, though hitherto it would seem little, if at all, attended to. And it appears to be a sufficient confirmation of this theory, that persons in good health, and engaged in active employments, most commonly dream of those matters wherein they are daily occupied; the uniform current of their ideas when awake, seldom taking any other direction during sleep; whereas, persons in a bad habit of body, or weak state of mind, and those who take little exercise, or who are not engaged in active business, have generally wild and extravagant dreams, and sometimes very disagreeable ones, of monsters, mad dogs, devils, deep pits, houses on fire, stormy oceans, and the like. In a word, when we consider the operations of our minds when awake, particularly of that active faculty, the imagination, how readily upon hearing, reading, or speaking of any person, place, action, or circumstance, it forms an idea in the mind of such person, place, &c., though, perhaps, many years have elapsed since we saw them, or even though we have never seen them, we need not be surprised, that the same active faculty should be able, when uncontrolled by the will and judgment, and but partially assisted by the memory, to raise up a series of images in succession, and thus to create an ideal world, and various ideal transactions in the mind.

The late Mr. Rennell, of Kensington, considers dreams to afford satisfactory proof that the mind can act without the intervention of the brain: upon this it has been well remarked, that we have not as yet sufficient data from which to estimate the degree of dependence of the former upon the latter, still we have no facts founded upon our present state of being, which can establish the total independence which he supposes. The proximate cause of sleep is undoubtedly corporeal, and, perhaps, consists in a certain inaptitude of the brain to receive the usual impulses of its immaterial tenant. When this inaptitude amounts to complete quiescence, the soul cannot display itself, because the instrument of its operations is in a state of repose. In such circumstances the sleep is profound, and no dreams take place. This repose or quiescence of the brain may be increased to absolute torpor for a season, as is seen in the hybernation of animals, and in those rare cases in the human species, where persons have remained for several hours, or even days, in a trance. When this torpor of the cerebral system abates, the immaterial principal is again enabled to resume its operations, owing to the renewed capabilities of the instrument. Thus, as the cause of sleep is corporeal, there are strong grounds for presuming that the cause of dreams is corporeal also. They occur oftenest when there is any irritation of the system in general, or of the brain in particular, hindering the complete repose of that part. When this irritation is great, as in general fever, accompanied with increased action of the blood-vessels within the head, sleep is often entirely prevented; or if it does take place, it is disturbed with frightful illusions. What is the precise state of the soul at such times, is a disputed point amongst metaphysicians. Perhaps, on so dark a subject, it may be allowable to hazard a conjecture, that the operations of the immaterial being are modified by the semi-

quiescence of the material organ, and that this want of correspondence between the agent and the instrument is the cause of the wild imaginations and false judgments that distinguish our dreams from our waking thoughts. Dreams, therefore, instead of proving the contrary, rather tend to show that the dependence of the immaterial upon the material part is perpetual and without exception, during the continuance of man's existence upon earth.

In whatever way we attempt to account for the manner, in which our powers of mind and body perform their functions in dreaming, we can, at least, apply to useful purposes the imperfect knowledge which we have been able to acquire concerning this series of phenomena. Our dreams are affected by the state of our health, by the manner in which we have passed the preceding day, by our general habits of life, by the hopes which we most fondly indulge, and the fears which prevail most over our fortitude when awake. From recollecting our dreams, therefore, we may learn to correct many improprieties in our conduct; to refrain from bodily exercises, or from meats and drinks that have unfavorable effects on our constitution; to resist, in due time, evil habits that are stealing upon us; and to guard against hopes and fears which detach us from our proper concerns, and unfit us for the duties of life. Instead of thinking what our dreams may forebode, we may, with much better reason, reflect by what they have been occasioned, and look back to those circumstances in our past life, to which they are owing. The sleep of innocence and health is sound and refreshing; their dreams delightful and pleasing. A distempered body, and a polluted or perturbed mind, are haunted in sleep with frightful, impure, and unpleasing dreams. The reader who is disposed to speculate farther on this subject, may consult Dr. Beattie's Essays, Hartley on Man, and the principal writers on physiology. We may add, some very beautiful fables have been written both by ancients and moderns in the form of dreams. The Somnium Scipionis is one of the finest of Cicero's compositions. In the periodical publications, which have diffused so much elegant and useful knowledge through Great Britain, the Tatlers, Spectators, Guardians, &c., we find a number of excellent dreams. Addison excelled in this way of writing. The public are now less partial to this species of composition than formerly. Dr. Beattie, in his valuable Essay on Dreaming, quotes a very fine one from the Tatler, and gives it due praise.

DREAR, *adj.* & *n. s.* } Sax. dreorig; Belg.
DREAR'Y, *adj.* } *treuer*; from Goth. verb
DREAR'IHEAD, *n. s.* } *rygga*, to lament. All
DREAR'IMENT, } the substantives signify
DREAR'INESS. } sorrow, united with fear: drear and dreary are, dismal; mournful; fearful.

The ill-faced owl, death's dreadful messenger;
The hoarse night raven, trump of doleful *drear*.
Spenser.

The messenger of death, the ghastly owl,
With *dreary* shrieks did also yell;
And hungry wolves continually did howl
At her abhorred face, so horrid and so foul.
Id. Faerie Queene.

But the good knight
Full of sad feare and ghastly *dreriment*,
When all this speech the living tree had spent,
The bleeding bough did thrust into the ground.
Spenser. Faerie Queene.

In urns and altars round,
A *drear* and dying sound
Affrights the flamens at their service quaint. *Milton.*

Obscure they went through *dreary* shades, that led
Along the vast dominions of the dead. *Dryden.*

Towns, forests, herds, and men promiscuous drowned,
With one great death deform the *dreary* ground.
Prior.

So with his dread Caduceus Hermes led
From the dark regions of the imprisoned dead,
Or drove in silent shoals the lingering train
To night's dull shore, and Pluto's *dreary* reign.
Darwin.

It struck even the besiegers' ear
With something ominous and *drear*,
An undefined and sudden thrill,
Which makes the heart a moment still.
Byron.

O luxury!
Bane of elated life, of affluent states,
What *dreary* change, what ruin, is not thine? *Id.*

DREDGE, *v. a.* & *n. s.* } Sax. drægan, to
DREDG'ER, *n. s.* } drag, of which word (or of dregs?) this word is a corruption. To gather into a particular kind of net: the net used: a dredger is one who uses such a net; and, perhaps from its net-like top, a box for scattering flour on meat, or amongst pastry; called also a dredging-box.

For oysters they have a peculiar *dredge*; a thick, strong net, fastened to three spills of iron, and drawn at the boat's stern, gathering whatsoever it meeteth lying in the bottom. *Carew.*

The oysters *dredged* in the Lyne find a welcome acceptance. *Id.*

DREDGING, in civil engineering, is the art of removing mud, silt, or other depositions from the bed of rivers, canals, harbours, or docks; and is accomplished by various tools and descriptions of machinery.

The common *dredging-boat* or *barge* is worked by two or more men, by whom the gravel, or ballast, is taken up in a leather bag, the mouth of which is extended by an iron hoop, attached to a pole, of sufficient length to reach the bottom: in the small way, two men are employed to work each pole. The barge being moored, one of the men takes his station at the stern, with the pole and bag in his hand, the other stands in the head, having hold of a rope, tied fast to the hoop of the leather bag. The man at the stern now puts the pole and bag down, over the barge's side, to the bottom, in an inclined position. The hoop being farthest from the man in the head of the barge, and having a rope, one end of which is fast to the gunwale of the barge, he passes it twice or thrice round the pole, and then holds it tight: the man in the head now pulls the rope, fastened to the hoop, and draws the hoop and bag along the ground, the other allowing the pole to slip through the rope as it approaches the vertical position, at the same time causing such a friction, that the hoop digs into the ground, the leather bag receiving whatever passes through the

hoop: both men now assist in getting a bag into the barge, and delivering its contents. When the bag is large, several men are employed; and, to increase the effect, a windlass, with wheel-work, is sometimes used. A chain or rope is brought to the winch from the spoon, through a block suspended from a small crane for bearing the spoon and its contents to the side of the boat, and bringing it over the gunwale to be emptied into it. The purchase rope is led upon deck by a snatch block in the proper direction for the barrel of the winch. From two to four men, can with this simple apparatus, lift from twenty to sixty tons in a tide, from a depth of from two and a half to three fathoms, when the ground is favorable. In this manner the convicts at Woolwich upon the Thames, have been long employed to perform the ballast-heaving, or dredging.

The *bucket* dredging-machine, whether worked by men, horses, or the steam-engine, is a great improvement on the above. The frame-work consists of two beams of timber, supported on a rod of iron with shores of wood; on these the full buckets move upon iron rollers fixed to the timber, while the empty buckets, attached to and guided by an endless chain, form a curve in descending to the bottom; as they respectively arrive they are intended to excavate or scoop up the silt or gravel from the ground. The operation of lowering and raising the frame once performed by crane-work, distinct from the machinery of the steam-engine, is now also accomplished by a power taken from it.

Plate Dredging Machines, AA, fig. 1, is a frame of timber bolted to the starboard gunwale, to support a large horizontal beam BB, fig. 2; another similar frame is fixed up in the middle of the ship at D, fig. 2, and the end of the beam is sustained by an upright post bolted to the opposite gunwale; the starboard end of the beam projects over the vessel's side, and has an iron bracket S fastened to it, to support one of the bearings for the long frame E E, composed of four timbers bolted together: the other end of the frame is suspended by pulleys *a*, *a*; from a beam F fixed across the stern, the upper ends of the outside beams of the frame E E have each a stout iron bolted to them, which are perforated with two large holes to receive two short cast iron tubes, one fastened to the iron bracket S at the end of the beam B, and the other to a cross beam of the frame A; these tubes act as the pivots of the frame E, upon which it can be raised or lowered by the pulleys *a*, *a*: they also contain bearings for an iron axis, on which a wheel or trundle O is fixed, containing four rounds. Another similar trundle P is placed at the bottom of the frame E E, and two endless chains *k*, *k*, pass round both, as is seen in the plan. Between every other link of the two chains, a bucket of plate iron *b b b* is fastened, and, as the chain runs round, the buckets bring up the soil; a number of cast iron rollers *d*, *d*, are placed between the beams of the frame to support the chain and buckets as they roll up. Four rollers *e*, *e*, are also placed on each of the outside beams, to keep the chains in their places on the frame, that they may not get off to one side. The motion is conveyed to the chains by means of a cast iron wheel at G in the plan, wedged on the end of the axis of the upper trundle O. The wheel is cast hollow, like a very short cylinder, and has several screws tapped through its rim, pointing to the centre, and pressing upon the circumference of another wheel enclosed within the hollow of the first, that it may slip round in the other, where any power greater than the friction of the screw is applied; the internal wheel is wedged on the same shaft with a large cog-wheel *f*, turned by the small cog-wheel *g*, on the axis of the steam-engine. The steam-engine is one of that kind called high pressure, working by the expansive force of the steam only, without condensation; *h* is the boiler containing the fire-place and cylinder within it; *i* is one of the connecting rods, and *l* the fly wheel on the other end of the same shaft as the wheel *g*. The pulleys *a*, which suspend the chain frame, are reeved with an iron chain, the tackle fall of which passes down through the ship's deck, and is coiled on a roller *m* in the plan, and represented by a circle in the elevation: on the end of the roller is a cog-wheel *p*, turned by the engine wheel *g*: the bearing of this wheel is fixed upon a lever, one end of which comes near that part of the steam-engine, where the cock, which regulates the velocity of the engine, is placed; so that one man can command both lever and cock, and, by depressing that end of the lever, cause the wheel *p* to geer with *g*, and consequently be turned thereby, and wind up the chain of the pulleys; *g* is a strong curved iron bar bolted to the vessel's side and gunwale, passing through an eye bolted to the frame E, to keep the frame to the vessel's side, that the tide or other accident may not carry it away.

A hopper or trough is suspended beneath the wheel *o*, by ropes from the beam B, into which the buckets *b*, *b*, *b*, empty the ballast they bring from the bottom; the hopper conveys it into a barge brought beneath it; this hopper is not shown in the plate, as it would tend to confuse parts already not very distinct. The motion of the whole machine is regulated by one man. The vessel being moored fast, the engine is started, and turns the chain of buckets: the engine tender now puts his foot upon a lever, disengages the wheel *p* from *g*, and by another takes off a gripe which embraced the roller *m*. This allows the end E of the frame to descend, until the buckets on the lower half of the chain drag on the ground, as shown in fig. 1, when he stops the further descent by the gripe, the buckets are filled in succession at the lower end of the frame, and brought up to the top, where they deliver their contents into the hopper before-mentioned: as they take away the ballast from the bottom, the engine tender lets the frame E down lower by means of the gripe lever, and keeps it at such a height that the buckets come up nearly full; if at any time the buckets get such deep hold as to endanger the breaking of the chain or stopping the engine, the coupling-box at G before-described, suffers the steam-engine to turn without moving the chain of buckets, and the engine tender, pressing his foot upon the lever which brings the wheel *p* to geer with *g*, causes the roller *n* to be turned by the engine, and raise up the frame E, until

the buckets take into the ground the proper depth, that the friction of the coupling-box at G will turn the chain without slipping in any considerable degree. The steam-engine here described is of six-horse power, and will load a small barge with ballast in an hour and a half. Generally the excavated matters are required as ballast for shipping. Those of the Thames are sold to the colliers of Shield and Newcastle, at the rate of about a shilling per ton, and the ballast hills of those places are said to consist of these matters principally. They are also used for embanking and filling up behind piers, and those taken from the London docks are carried to the Osier Forelands on the banks of the river Lea, where they have already formed a valuable frontage for building. When dry they have also been used as brick-earth. When these matters are required to be transported by water to a distance, the receiving boat is made with two holds sloping towards the keel or bottom, for the purpose of lessening the width of the discharging apertures, which are shut with hatches, or hinged doors. These opening outwards, the pressure of the water prevents them from being opened until the time of arrival at the proper place; when chains attached to ring-bolts force them apart, and the whole contents of the boat escape.

The *Scouring* or *Dredging Basin* is a water-tight compartment of a harbour, furnished with sluices, and designed to contain a quantity of tidal or river water, to be run off at pleasure. Where the command of head-water is sufficient, this is found the most effectual of all modes of disposing of loosened stuff. Most modern engineers have therefore included a scouring basin in their designs for tide harbours. The late Mr. Rennie reported that 400,000 tons of mud were annually discharged by the sewers of London into the river Thames. See HARBOUR.

DREGS, *n. s.* } Goth. *dregg*; Teut. *trus-*
DREG'GISH, *adj.* } *cen*; Lat. *fæces*; Gr. τρυξ,
DREG'GY, *adj.* } τρυγος, refuse. (Used by Shakspeare in the singular, see below.) The sediments or lees of liquors; offal; refuse of any kind: dreggy is, containing dregs.

TROI. —— What makes this pretty abruption? What too curious *dreg* espies my sweet lady in the fountain of our love?

TRES. More *dregs* than water, if my fears have eyes. *Shakspeare. Troilus and Cressida.*

The king by this journey purged a little the *dregs* and leaven of the northern people, that were before in no good affections towards him. *Bacon.*

Fain would we make him author of the wine,
If for the *dregs* we would some other blame.
Davies.

Ripe grapes being moderately pressed, their juice may, without much *dreggy* matter, be squeezed out. *Boyle.*

To give a strong taste to this *dreggish* liquor, they fling in an incredible deal of broom or hops, whereby small beer is rendered equal in mischief to strong. *Harvey on Consumptions.*

Heaven's favourite thou, for better fates designed
Than we, the *dregs* and rubbish of mankind.
Dryden.

What diffidence we must be under whether God will regard our sacrifice, when we have nothing to offer him but the *dregs* and refuse of life, the days of loathing and satiety, and the years in which we have no pleasure. *Rogers.*

Such run on poets, in a raging vein,
Even to the *dregs* and squeezings of the brain.
Pope.

This the chalice of the fornications of rapine, usury, and oppression, which was held out by the gorgeous eastern harlot; which so many of the people, so many of the nobles of the land, had drained to the very *dregs*. *Burke.*

The body of your work is a composition of *dregs* and sediments, like a bad tavern's worst wine. *Sheridan.*

His had been quaffed too quickly, and he found
The *dregs* were wormwood; but he filled again,
And from a purer fount, on holier ground,
And deemed its spring perpetual; but in vain!
Still round him clung invisibly a chain
Which galled for ever. *Byron.*

DREIN, *v. n.* See DRAIN. To empty. The same with drain; spelt differently perhaps by chance.

She is the sluice of her lady's secrets: tis but setting her mill a-going, and I can *drein* her of them all. *Congreve.*

'Tis *dreined* and emptied of its poison now;
A cordial draught. *Southern.*

DRELINCOURT (Charles), a minister of the reformed church at Paris, was born at Sedan in 1595. He is best known in England by his Consolations against the Fears of Death, which was translated, and has been often printed. His third son, professor of physic at Leyden, was physician to the prince and princess of Orange before their accession to the crown of England. He died in 1660.

DRENCH, *v. a.* & *n. s.* } Saxon drencan;
DRENCH'ER. } Goth. *drænca*, to immerse, moisten. To soak; steep; saturate with moisture; physic abundantly or violently: the subtantives corresponding. A drench has been defined, 'physic for a brute.'

And he seide, come thou and Peter ghede doun fro the boot and wakide on the watris to come to Jhesus, But he sigh the wynd strong, and was aferd, and whanne he biganne to *drenche*, he criede and seide, lord make me saaf. *Wiclif. Matt.* xiv.

Our garments being as they were *drenched* in the sea, hold notwithstanding their freshness and glosses. *Shakspeare.*

In swinish sleep
Their *drenched* natures lie, as in a death.
Id. Macbeth.

Harry, says she, how many hast thou killed to-day? Give my roan horse a *drench*, says he; and answers, fourteen, an hour after. *Id. Henry IV.*

Their counsels are more like a *drench* that must be poured down, than a draught which must be leisurely drank if I liked it. *King Charles*

Let such bethink them, if the sleepy *drench*
Of that forgetful lake benumb not still,
That in our proper motion we ascend. *Milton.*

To-day deep thoughts learn with me to *drench*
In mirth, that after no repenting draws. *Id.*

Now dam the ditches, and the floods restrain;
Their moisture has already *drenched* the plain.
Dryden.

A *drench* of wine has with success been used,
And through a horn the generous juice infused.
Id.

Too oft, alas! has mutual hatred *drenched*
Our swords in native blood. *Philips.*

If any of your cattle are infected, speedily let both sick and well blood, and *drench* them.
Mortimer's Husbandry.

If Gideon's fleece, which *drenched* with dew he found,
While moisture none refreshed the herbs around,
Might fitly represent the Church, endowed
With heavenly gifts, to Heathens not allowed.
Cowper.

The one cast up upon that great book
Ycleped The Family Receipt Book;
By which she rules in all her courses,
From stewing figs to *drenching* horses.
Sheridan.

Ah me! neglected on the lonesome plain,
As yet poor Edwin never knew your lore,
Save when against the winter's *drenching* rain,
And driving snow, the cottage shut the door.
Beattie.

Then she wrung
His dewy curls long *drenched* by every storm.
Byron.

DRENT, *part.* Probably corrupted from drenched, to make a proverbial rhyme to brent or burnt.

What flames, quoth he, when I the present see
In danger rather to be *drent* than brent?
Faerie Queene.

DRESDEN, a handsome city of Germany, the capital of Saxony, is situated on both sides of the Elbe, at the influx of the Weisseritz. There is also a third division, lying on the Weisseritz, called Frederickstadt. It is approached in almost every direction by delightful avenues, leading through a rich and fertile country, and bounded by gentle acclivities. On entering the town, the noble bridge across the Elbe first strikes the eye of the spectator. It is built entirely of freestone, and is about 550 paces in length, consisting of nineteen arches. A delightful prospect spreads on every side. The streets of Dresden are clean, broad, and well paved and lighted. Its public buildings are eleven Lutheran churches, two Catholic, and one Calvinist; the more recent of the Catholic churches, built in the middle of the eighteenth century, is one of the finest ecclesiastical edifices in Germany. It has a flat roof cased with copper, and a tower 300 feet in height. But the late electoral, now the royal palace, is both an extensive repository of the fine arts, which the traveller should not omit to explore, and a magnificent, though irregular structure. It has a tower 355 feet in height, and a number of remarkable apartments, particularly the well known green vault, divided into eight rooms, paved with marble, and containing numerous statues, ivory work, silver plate, vases, and precious stones. Before the war of 1756 this collection was almost unrivalled. Augustus II. and his preceding electors had made the fine arts an object of their constant patronage; and to him this city is indebted for most of its modern improvements. Near the palace is the chancery, and a large building containing a valuable collection of paintings. The house of assembly for the diet of Saxony is an elegant building, as well as the palaces called after the princes Anthony and Maximilian. In the suburbs are the Zwinger gardens, a promenade containing a valuable cabinet of natural history. The arsenal has a curious collection of early fire-arms. The castle, formerly belonging to the counts of Bruhl, is the great depôt of the porcelain manufactures. Another remarkable edifice is the Dutch and Japanese palace, a square building, rising amidst groves and thickets, and containing the royal library, said to consist of 150,000 volumes, some valuable statues, and a beautiful collection of porcelain.

Here is a military school, and an academy for cadets of noble family. The charitable institutions, particularly the house of industry, are said to be well regulated. It finds employment for more than 3000 individuals. The manufactures are those of lace, jewellery, porcelain, earthenware, mirrors, tapestry, and plaited straw. There are several public gardens outside of the city, of which the largest, the royal garden, is occasionally enlivened with concerts. There is also in this neighbourhood a romantic spot, called the Planische Grund, a valley formed by steep rocks of granite, and watered by the Weisseritz. Vineyards extend along a hill in the direction of the castle of Pilnitz, the summer residence of the royal family, and remarkable for the coalition of 1792. In 1755 the population of Dresden was 63,000; in 1788, 53,000; in 1801, 48,000; in 1811, 45,000. This decrease is ascribed to the alarms and actual calamities to which Dresden has been exposed in the late wars of the continent; and, indeed, ever since Prussia ventured to cope with Austria. It was taken by the Prussians in 1745, and again in 1756; when it became the scene of war and of extreme distress. August 26th and 27th, 1813, the combined Austrian and Russian army advanced in great force from the Bohemian frontier, and attacked this city, but were obliged to retire. Dresden remained in the possession of the French until the scene of war was transferred to the neighbourhood of Leipsic; and the decisive battles in that situation obliged Buonaparte to evacuate Germany. Marshal St. Cyr was blockaded in it, and obliged to capitulate on the 6th of November, 1813.

Dresden was stripped of its walls in 1810 to repair the fortifications of Torgau. Since the peace it has been rapidly improving, and the population is now taken at 60,000. It is situated 100 miles south-west of Berlin.

DRESS, *v. a., v. n. & n. s.*, DRESS'ER, *n. s.*, DRESS'ING, DRESS'ING-ROOM, DREST, *part.* Fr. *dresser*; Ital. *drizzare*; Teuton. *diriser*; from Lat. *dirigo*; Gr. δρᾶσαι, to make ready. To clothe; robe; adorn. Hence to cover a wound with medicaments; to rectify; adjust and prepare, generally: used also in a particular sense for the trimming, currying, and rubbing horses, as well as breaking them in; and for preparing food for the table. As a neuter verb, it means to pay particular attention to dress; and among soldiers, to keep in line. As a substantive, it is synonymous with clothes, attire; and sometimes means skill; exactness in putting on dress. Dressing is synonymous with dress:

a dresser is one employed in dressing; and a useful kitchen-board on which food is dressed.

To geve light to them that sitten in derknessis, and in schadowe of deeth, to *dresse* our feet into the weye of pees. *Wiclif.*

When he *dresseth* the lamps, he shall burn incense. *Exodus* xxx.

Said he unto the *dresser* of his vineyard, Behold, these three years I come seeking fruit on this fig-tree, and find none. *Luke.*

Enforsed to slepe, and for to take some reste
And to lye downe as soone as I my *dreste*
At Harwyche porte slumbrynge as I laye
In myne hostes house called powers keye. *Skelton.*

'Tis burnt, and so is all the meat.
What dogs are these! Where is the rascal cook?
How durst you, villains! bring it from the *dresser*,
And serve it thus to me that love it not?
Shakspeare.

Adam! well may we labour still to *dress*
This garden; still to tend plant, herb, and flower.
Milton.

Where was a fine room in the middle of the house, handsomely *dressed up*, for the commissioners to sit in. *Clarendon.*

Our infirmities are so many, that we are forced to *dress* and tend horses and asses, that they may help our needs. *Taylor.*

The first request
He made was, like his brothers to be *dressed*;
And, as his birth required, above the rest. *Dryden.*

A steed
Well mouthed, well managed, which himself did *dress*;
His aid in war, his ornament in peace. *Id.*

Few admired the native red and white,
Till poets *dressed* them *up* to charm the sight. *Id.*

Thus the voluptuous youth, bred up to *dress*
For his fat grandsire some delicious mess,
In feeding high his tutor will surpass,
An heir apparent of the gourmand race. *Id.*

She hurries all her hand-maids to the task;
Her head alone will twenty *dressers* ask.
Id. Juvenal.

A maple *dresser* in her hall she had,
On which full many a slender meal she made. *Id.*

The mind loses its natural relish of real truth, and is reconciled insensibly to any thing that can be *dressed up* into any faint appearance of it. *Locke.*

When you take down dishes, tip a dozen upon the *dresser*. *Swift's Directions to the Cook.*

Latin books might be found every day in his *dressing-room*, if it were carefully searched. *Swift.*

Lollia Paulina wore, in jewels, when *dressed out*, the value of three hundred twenty-two thousand nine hundred and sixteen pounds thirteen shillings and four-pence. *Arbuthnot.*

In time of my sickness another chirurgeon *dressed* her. *Wiseman.*

The second day after we took off the *dressings*, and found an eschar made by the catheretic.
Id. on Tumours.

Full *dress* creates dignity, augments consciousness, and keeps at distance an encroacher. *Clarissa.*

A robe obscene was o'er his shoulders thrown,
A *dress* by fates and furies worn alone.
Pope's Stat.

The men of pleasure, *dress*, and gallantry. *Pope.*

When you *dress* your young hops, cut away roots or sprigs. *Mortimer's Husbandry.*

A lady of genius will give a genteel air to her whole *dress* by a well-fancied suit of knots, as a judicious writer gives a spirit to a whole sentence by a single expression. *Gay.*

Dress drains our cellar dry,
And keeps our larder lean; puts out our fires;
And introduces hunger, frost, and woe,
Where peace and hospitality might reign. *Cowper.*

And dear to love, to memory dear,
It brightens through the starting tear;
Like the glad bow, by fancy *drest*,
That beams on evening's watery vest. *Bowdler.*

Soldiers *dress* by one another in ranks, the body collectively *dresses* by some given object.
James's Military Dictionary.

DRESSING, in surgery. See SURGERY.

DRESSING OF MEAT, by means of culinary fire, is intended to loosen the compages or texture of the flesh, and dispose it for dissolution and digestion in the stomach. The usual operations are roasting, boiling, and stewing. In roasting, it is observed, meat will bear a much greater and longer heat than either in boiling or stewing; and in boiling, greater and longer than in stewing. Roasting being performed in the open air, as the parts begin externally to warm, they extend and dilate, and so gradually let out part of the rarefied included air, by which means the internal succussions, on which the dissolution depends, are much weakened and abated. Boiling being performed in water, the pressure is greater, and consequently the succussions to lift up the weight are proportionably strong, by which means the coction is hastened; and even in this way there are great differences; for the greater the weight of water the sooner is the business done. In stewing, though the heat be much less than what is employed in the other methods, the operation is much more quick, because performed in a close vessel, and full; by which means the succussions are oftener repeated, and more strongly reverberated. Hence, the force of Papin's digestor. Boiling, Dr. Cheyne observes, draws more of the rank strong juices from the meat, and leaves it less nutritive, but lighter, and easier of digestion; roasting, on the other hand, leaves it fuller of the strong nutritive juices, but harder to digest, and needing more dilution. Dr. Brown insists, that roasted meat is more easily digested, and every way fitter for a weak stomach than boiled. Strong and full grown animal food should be boiled, and the young and tender roasted.

DREVET (Peter), the elder and younger, two eminent French engravers. The father instructed, but was surpassed by his son, who was a member of the Royal Academy of painting and sculpture. His portraits are neat and elegant, but labored to the last degree. He particularly excels in representing lace, silk, fur, velvet, and other ornamental parts of dress. His historical prints, in point of neatness and exquisite workmanship, are scarcely to be equalled. His Presentation of Christ in the Temple, is reckoned the best of these. The following are also much valued: the Meeting of Abraham's Servant with Rebecca at the Well; and Abraham, with Isaac on the Altar, dated 1707; both large upright plates from A. Coypel. Among his portraits, the following are held in the highest estimation: M. Bossuet, bishop of Meaux, a whole-length

figure standing; and Samuel Bernard, a whole-length figure in a chair.

DREUX, a town of France, in the department of the Eure and Loire, and ci-devant province of Beauce. It is remarkable for its antiquities. It was taken by Henry II. of England in 1186, and by Henry V. in 1421 It is also remarkable for a battle fought in the neighbourhood, December, 1562, between the Papists and Protestants. Some derive its name from the Druids. It has two churches, St. Stephen's and Notre Dame, or the great church, which is well built. It has a cloth manufacture, and is seated on the river Blaise, at the foot of a mountain, forty-five miles west by south of Paris. Population 5500.

DRIB, *v. a.* Contracted perhaps from dribble. To crop; to cut off; to defalcate.

Merchants gains come short of half the mart;
For he who drives their bargains *dribs* a part.
Dryden.

DRIB'BLE, *v. n.* & *v. a.* } Or dripple, a di-
DRIB'LET, *n. s.* } minutive of DRIP, which see. To fall in drops; to throw down in drops. A driblet is a small sum of money

Believe not that the *dribbling* dart of love
Can pierce a complete bosom. *Shakspeare.*

Twelve long years of exile borne,
Twice twelve we numbered since his blest return;
So strictly wert thou just to pay,
Even to the *dribblet* of a day. *Dryden.*

Let the cook follow with a ladle full of soup, and *dribble* it all the way up stairs.
Swift's Rules to Servants.

Semilunar processes on the surface owe their form to the *dribbling* of water that passed over it.
Woodward on Fossils.

A *dribbling* difficulty, and a momentary suppression of urine, may be caused by the stone's shutting up the orifice of the bladder. *Arbuthnot on Aliments.*

That wee bit heap o' leaves an' stibble,
Has cost thee mony a weary nibble!
Now thou's turned out, for a' thy trouble,
But house or hald,
To thole the winter's sleety *dribble*,
An' cranreuch cauld! *Burns.*

DRIFT, *n. s.*, *v. a.* & *v. n.* From drive. Impulse; prevailing influence or tendency; violent course: hence a snow-drift or violent shower, and a heap or stratum of any matter thrown together, or at random. The verb is derived from the substantive, and means, to draw; impel along; or throw into heaps.

The mighty trunk, half rent with rugged rift,
Doth roll adown the rocks, and fall with fearful *drift*.
Faerie Queene.

Our thunder from the south
Shall rain their *drift* of bullets on this town.
Shakspeare.

Some log, perhaps, upon the waters swam,
An useless *drift*, which rudely cut within,
And hollowed, first a floating trough beeame,
And cross some riv'let passage did begin. *Dryden.*

A man being under the *drift* of any passion, will still follow the impulse of it till something interpose, and, by a stronger impulse, turn him another way.
South.

The main *drift* of his book being to prove, that what is true is impossible to be false, he opposes nobody. *Tillotson.*

The *drift* of the pamphlet is to stir up our compassion towards the rebels. *Addison.*

This, by the stile, the manner, and the *drift*,
'Twas thought could be the work of none but Swift.
Swift.

The ready racers stand;
Swift as on wings of wind upborne they fly,
And *drifts* of rising dust involve the sky.
Pope's Odyssey.

Snow, no larger than so many grains of sand, *drifted* with the wind in clouds from every plain.
Ellis's Voyage.

He wanders on
From hill to dale, still more and more astray,
Impatient flouncing through the *drifted* heaps.
Thomson.

'Prince, to these walls give access free
At all times for my friends and me.'
Phrygius full well perceived her *drift*
Yet nobly ratified his gift. *Sheridan.*

DRIFT, in navigation, the angle which the line of a ship's motion makes with the nearest meridian, when she drives with her side to the wind and waves, and is not governed by the power of the helm; it also implies the distance which the ship drives on that line. A ship's way is only called drift in a storm; and then when it blows so vehemently as to prevent her from carrying any sail, or at least restrains her to such a portion of sail as may be necessary to keep her sufficiently inclined to one side, that she may not be dismasted by her violent laboring, produced by the turbulence of the sea.

DRIFT-SAIL, a sail used under water, veered out right a-head by sheets, as other sails are. It serves to keep the ship's head right upon the sea in a storm, and to hinder her driving too fast in a current.

DRILL, *v. a.*, *v. n.*, & *n. s.* Germ. and Dutch *drillen*; Sax. *dirhan*, of the verb *thregian*, to turn; from *durgh* or *turgh*, through. To pierce or bore; hence to drain: as a neuter verb, it means to flow gently, trickle; and hence, probably, to cause so to flow; to conduct; to train. Drill is used substantively for a boring instrument; a dribbling brook; military exercise; and a kind of monkey.

Springs through the pleasant meadows pour their *drills*,
Which snake-like glide between the bordering hills.
Sandys.

My body through and through he *drilled*,
And Whacum by my side lay killed. *Hudibras.*

The foe appeared drawn up and *drilled*,
Ready to charge them in the field. *Id.*

The way of tempering steel to make gravers, *drills*, and mechanical instruments, we have taught artificers.
Boyle.

Shall the difference of hair be a mark of a different internal specifick constitution between a changeling and a *drill*, when they agree in shape and want of reason? *Locke.*

When by such insinuations they have once got within him, and are able to *drill* him on from one lewdness to another, by the same arts they corrupt and squeeze him. *South.*

She has bubbled him out of his youth: she *drilled* him on to five-and-fifty, and she will drop him in his old age. *Addison.*

Drills are used for the making such holes as punches will not serve for; as a piece of work that hath already its shape, and must have an hole made in it. *Moxon.*

When a hole is *drilled* in a piece of metal, they hold the drill-bow in their right hand; but, when they turn small work, they hold the drill-bow in their left hand. *Id.*

Tell, what could *drill* and perforate the poles,
And to the' attractive rays adapt their holes?
Blackmore.

Drilled through the sandy stratum every way,
The waters with the sandy stratum rise. *Thomson.*

Some *drill* and bore
The solid earth, and from the strata there
Extract a register, by which we learn,
That he who made it, and revealed its date
To Moses, was mistaken in its age. *Cowper.*

DRILL-SOWING, a method of sowing grain or seed of any kind, so that it may all be at a proper depth in the earth, which is necessary to its producing healthful and vigorous plants. For this purpose a variety of drill ploughs have been invented and recommended; but from the expense attending the purchase, and the extreme complication of their structure, there is no instrument of this kind, as yet discovered, that has been brought into general use. This method, however, is greatly recommended in the Georgical Essays. See HUSBANDRY.

DRINK, *v. a.*, *v. n.*, & *n. s.*
DRINK'ABLE, *adj.*
DRINK'ER, *n. s.*
DRINK'MONEY,
DRUNK, *adj.*
DRUNK'ARD, *n. s.*
DRUNK'EN, *adj.*
DRUNK'ENLY, *adv.*
DRUNK'ENNESS, *n. s.*

Gothic *drecka*; Sax. drencan; Teut. and Belg. *trincken*, perhaps from the sound of drinking from a cup.—Minsheu. To swallow liquid; quench thirst: hence to feast; guzzle habitually; salute in drinking. As an active verb, it means to swallow; suck up; absorb; to act upon by drinking; and is used with the intensive particles *off*, *up*, and *in*: drink is liquid of any kiud. Drinkable is proper or agreeable to drink: drinker is applied both to him who moderately as well as him who excessively drinks: drink-money, is money given to procure, or instead of, drink: drunk, and drunken, are the regular participial adjectives of drink: drunkard is one who habitually drinks to excess; and drunkenly, drunkenness, the corresponding adverb and substantive.

For Jon cam neither etynge ne *drynkynge*, and thei seyen he hath a devil. The son of man cam etynge and *drynkynge*; and thei seyen lo a man a gloutoun and a *drynkere* of wyn, and a frend of pupplicanes and of synful men. *Wiclif. Mat.* xi.

And nyle ghe be *drunken* of wyn in which is leccherie, but be ghe fillid with the hooli goost. *Wiclif. Effesies* v.

She said, *drink*, and I will give thy camels *drink* also; so I *drank*, and she made the camels *drink* also. *Gen.* xxiv. 46.

Benhadad was *drinking* himself *drunk* in the pavilions. 1 *Kings.*

Withouten lake mete never was his hous
Of fish and flesh, and that so plenteous
It snewed in his hous of mete and *drinke*
Of alle deintees that men coud thinke.
Chaucer. Prol. to Cant. Tales.

Thou livest in bliss
That earthly passion never stains;
Where, from the purest spring,
The sacred nectar sweet
Is thy continual *drink*.
Spenser. The Mourning Muse.

Passion is the *drunkenness* of the mind, and therefore in its present workings not controllable by reason. *Spenser.*

Come, we have a hot venison pasty to dinner: come, gentlemen, I hope we shall *drink* down all unkindness. *Shakspeare.*

I take your princely word for those redresses.
—I gave it you, and will maintain my word;
And thereupon I *drink unto* your grace. *Id.*

My ears have yet not *drunk* a hundred words
Of that tongue's uttering, yet I know the sound. *Id.*

Then let the earth be *drunken* with our blood. *Id.*

We will give you rare and sleepy *drinks*. *Id. Winter's Tale.*

We came to fight you.——For my part, I am sorry it is turned to a *drinking*. *Id. Antony and Cleopatra.*

Done in a state of inebriation.

When your carters, or your waiting vassals,
Have done a *drunken* slaughter, and defaced
The precious image of our dear Redeemer,
You straight are on your knees for pardon, pardon. *Shakspeare.*

My blood already, like the pelican,
Hast thou tapt out, and *drunkenly* caroused. *Id.*

Some blood drawn on me would beget opinion
Of my more fierce endeavour. I've seen *drunkards*
Do more than this in sport. *Id. King Lear.*

It were good for those that have moist brains, and are great *drinkers*, to take fume of lignum. aloes, rosemary, and frankincense, about the full of the moon. *Bacon.*

Drunken men imagine every thing turneth round: they imagine that things come upon them; they see not well things afar off; those things that they see near hand, they see out of their place, and sometimes they see things double. *Id.*

When God made choice to rear
His mighty champion, strong above compare,
Whose *drink* was only from the liquid brook! *Milton.*

O madness, to think use of strongest wines,
And strongest *drinks*, our chief support of health. *Id.*

Drunkenness is the way to all bestial affections and sins. *Bp. Hall's Contemplations.*

Cannot he that wisely declines walking upon the ice for fear of falling, though possibly it might carry him sooner to his journey's end, as wisely forbear *drinking* more wine than is necessary, for fear of being *drunk*, and the ill consequences thereof. *Lord Clarendon.*

Every going off from our natural and common temper, and our usual severity of behaviour, is a degree of *drunkenness*. *Taylor's Rule of Holy Living.*

The body being reduced nearer unto the earth, and emptied, he cometh more porous, and greedily *drinketh* in water. *Browne's Vulgar Errours.*

This was the morn when issuing on the guard,
Drawn up in rank and file, they stood prepared
Of seeming arms to make a short assay;
Then hasten to be *drunk*, the business of the day.
Dryden.

On the other side, let a *drunkard* see that his health decays, his estate wastes; discredit and diseases, and the want of all things, even of his beloved *drink*, attends him in the course he follows. *Locke.*

The *drinker* and debauched person is the object of scorn and contempt. *South.*

One man gives another a cup of poison, a thing as terrible as death; but at the same time he tells him that it is a cordial, and so he *drinks* it *off*, and dies. *Id.*

He will drown his health and his strength in his belly; and, after all his *drunken* trophies, at length *drink* down himself too. *Id.*

We generally conclude that man *drunk*, who takes pains to be thought sober. *Spectator.*

We should for honour take
The *drunken* quarrels of a rake. *Swift.*

Phemius! let acts of gods, and heroes old,
What ancient bards in hall and bower have told,
Attempered to the lyre, your voice employ;
Such the pleased ear will *drink* with silent joy.
Pope.

I *drink* delicious poison from thy eye. *I'.*

Brush not thy sweeping skirt too near the wall;
Thy heedless sleeve will *drink* the coloured oil.
Gay.

Amongst *drinks*, austere wines are apt to occasion foul eruptions. *Arbuthnot on Aliments.*

Peg's servants were always asking for *drink-money*. *Arbuthnot.*

The Lacedemonians trained up their children to hate *drunkenness*, by bringing a drunken man into their company. *Watts on the Mind.*

It is not necessary to be *drunk* one's self, to relish the wit of *drunkenness*. Do we not judge of the *drunken* wit of the dialogue between Iago and Cassio (the most excellent in its kind), when we are quite sober? Wit is wit, by whatever means it is produced; and, if good, will appear so at all times. I admit that the spirits are raised by *drinking*, as by the common participation of any pleasure: cock-fighting or bear-baiting will raise the spirits of a company, as *drinking* does, though surely they will not improve conversation. I also admit, that there are some sluggish men who are improved by *drinking*, as there are fruits which are not good till they are rotten: there are such men, but they are medlars. *Johnson.*

No eyes
But mine now *drink* this sight of loveliness;
I should be sole in this sweet solitude,
And with the Spirit of the place divide
The homage of these waters. *Byron.*

Would that I had died
Ere such a monster's victim I had been!
What may this midnight violence betide,
A sudden fit of *drunkenness* or spleen? *Id.*

DRINK is an essential part of our ordinary food in a liquid form. See FOOD. The general use of drink is, to supply fluid; facilitate solution; of course to assist the evacuation of the stomach, and promote the progress of the aliment through the intestines; for, by the contraction of the longitudinal fibres of the stomach, the pylorus is drawn up, and nothing but fluid can pass; which, by its bulk, makes a hurried progress through the intestines, and so determines a greater excretion by stool, as less than can be absorbed by the lacteals. Hence, a large quantity of common water has been found purgative; and, ceteris paribus, that aliment which is accompanied with the largest proportion of drink, makes the largest evacuation by stool. Here a question has arisen, about where the feculent part of the aliment is first remarkably collected. It is commonly thought to be in the great gut; but, undoubtedly, it often begins in the ilium, especially when the drink is in a small proportion, and when the progress of the aliment is slow; for when the contents of the guts are very fluid, they are quickly pushed on, and reach the great guts before they deposit their feculency. Another effect of drink is, to facilitate the mixture of the lymph, refluent from every part of the system, with the chyle. In the blood-vessels, where all must be kept fluid in order to proper mixture, drink increases the fluidity, and gives tension, by its bulk. Hence, drink contributes to sanguification, as sometimes food gives too dense a nutriment to be acted upon by the solids; and hence, also, drink promotes the secretions. These are the effects of drink in general; but the more liquid the food is, it is the sooner evacuated, and less nourishment is extracted. Hence, drink is, in some degree, opposed to nourishment; and so, ceteris paribus, those who use least drink are most nourished. All these effects may be produced by simple water; and it is said, that other liquors are fit for drink in proportion to the water they contain. Water, however, when used as drink, is most commonly impregnated with vegetable and farinaceous substances, which thus both operate as drink and contribute to nourishment. Sometimes we impregnate water with the subacid fruits; and thus it acquires other qualities, of considerable use in the animal economy. All drinks may be reduced to two heads: first, pure water, or where the additional substance gives no additional virtue; second, fermented liquors. The latter have not only the qualities of the first, but also qualities peculiar to themselves. Fermented liquors are more or less poignant to the taste, and better calculated to quench thirst. They are peculiarly adapted for stimulating the mouth, fauces, and stomach, to throw out the saliva and gastric liquor. By their acescency they are fitted for some beneficial purposes in certain states of the system; by their fluidity they dilate viscid food; though in this respect they answer no better than common water. Carried into the blood-vessels, in so far as they retain any saline property, they stimulate the excretories, and promote urine and sweat. Many physicians, in treating of fermented liquors, have rejected their nutritious virtues, which certainly ought to be taken into the account, though, by expediting the evacuation by stool, they cause less of the nutritious parts of the aliment to be taken up, and, by stimulating the excretories, make these nutritious parts to rest for a shorter time in the system. All these and many other effects arise from fermented liquors. Their acescency sometimes promotes the disease of acescency, by increasing that of vegetables, acting as a ferment, and so producing flatulency, purging, cholera, &c. So that, with vegetable aliment, as little drink is necessary, the most innocent is pure water; and it is only with animal food that fermented liquors are necessary. In warmer climates, fermented liquors would seem requisite to obviate alkalescency and heat. But it should be considered, that, though fermented liquors contain an acid, yet they also contain al-

cohol; which, though it adds stimulus to the stomach, yet is extremely hurtful in the warmer climates, and wherever alkalescency prevails in the system. Nature in these climates has given men an inclination for water impregnated with acid fruits, e. g. sherbet: but this needs to be cautiously used, as in these countries they are apt to shun animal food, using too much of the vegetable, and often thus causing dangerous refrigerations, choleras, diarrhœas, &c. It may be proper here to mention the chief heads on which the varieties of fermented liquors depend. 1st. They are owing to the quality of the subject, as more or less viscid; and to its capacity also of undergoing an active fermentation, although perhaps the more viscid are more nutritious. Hence the difference between ales and wines; by the first, meaning fermented liquors from farinacea, by the second, from the fruits of plants. It depends, 2dly, On the acerbity, acidity, nature, and maturation, of the fruit. 3dly. The variety depends on the conduct of the fermentation. In general, fermentation is progressive, being at first active and rapid, detaching the fixed air or gas sylvestre, at the same time acquiring more acid than before. These qualities of flatulency and acidity remain for some time: but, as the fermentation goes on, the liquor becomes more perfect, no air is detached, and alcohol is produced; so that fermented liquors differ according to the progress of the fermentation, and have different effects on the system. When fermentation is stopped before it comes to maturity, though naturally it proceeds in this way, yet, by addition of new ferment, it may again be renewed with a turbid intestine motion. In the inordinate quantities in which fermented liquors are occasionally drunk with a view of conviviality, they have a tendency to undermine the health, while they appear to fatten the body; occasioning dropsy and other fatal diseases. The strong ale so much drunk in the country certainly has had many victims, as well as fermented liquors of other kinds; but those beverages generally drunk at our meals under the name of beer and porter are certainly most wholesome, when free of acidity, and answer every salutary purpose in the animal economy. See Digestion.

DRINO, a river of European Turkey, in Albania, formed of the White Drino, which falls from Mount Boras, on the frontiers of Dalmatia and Servia, and the Black Drino, a much larger stream, which takes its rise on the northern declivity of the mountains of Sagori, and after passing through the lake of Ochrida, flows in a northerly direction till it meets the former. The united stream now runs due west, separating Albania from Dalmatia, and finally empties itself by seven mouths into the Adriatic, below Alessio, forming several islands, and the Gulf of Drino. It is navigable for large rafts for nearly 100 miles. On the banks are noble forests.

Drino is also the name of another large river of European Turkey, which separates Bosnia from Servia, and falls into the Save below Drinovar.

DRIP, *v. n., v. a.* & *n. s.* } Dutch, *drippen;*
Dripp'ing, *n. s.* } Teuton. *dripelen;*
Dripp'ingpan, *n. s.* } Dan. *dryppe.* See Drop. To fall in drops, or let drops fall; in a particular sense, to let fat drop in roasting; that which falls in drops or small quantities. In this last sense drip is synonymous with dripping.

Let what was put into his belly, and what he *drips*, be his sauce. *Walton's Angler.*

His offered entrails shall his crime reproach,
And *drip* their fatness from the hazle broach.
Dryden's Virgil.

The soil, with fattening moisture filled,
Is cloathed with grass, and fruitful to be tilled;
Such as in fruitful vales we view from high,
Which *dripping* rocks, not rolling streams, supply.
Dryden.

The finest sparks, and cleanest beaux,
Drip from the shoulders to the toes. *Prior.*

Her flood of tears
Seem like the lofty barn of some rich swain,
Which from the thatch *drips* fast a shower of rain.
Swift.

Shews all her secrets of house-keeping;
For candles how she trucks her *dripping*. *Id.*

When the cook turns her back, throw smoaking coals into the *drippingpan*. *Id.*

Water may be procured for necessary occasions from the heavens, by preserving the *drips* of the houses. *Mortimer.*

Though thy clime
Be fickle, and thy year most part deformed
With *dripping* rains, or withered by a frost,
I would not yet exchange thy sullen skies,
And fields without a flower, for warmer France,
With all her vines. *Cowper.*

There breathes a living fragrance from the shore,
Of flowers yet fresh with childhood; on the ear
Drops the light *drip* of the suspended oar,
Or chirps the grasshopper one good-night carol more.
Byron. Childe Harold.

And thou, ghastly Beldame!
Dripping with dusky gore, and trampling on
The carcases of Inde—away! away! *Byron.*

DRISSA, a town of the government of Witepsk, European Russia, situated on the right bank of the Dwina, at the influx of the Drissa. Here was situated the entrenched camp, constructed by the Russians in 1812, to oppose the progress of the French, but abandoned on the approach of the latter. It is twenty miles W.N.W. of Polotzk, and 272 south of St. Petersburgh.

DRIVE, *v. a.* & *n. s.* } Sax. ðriven; Swe-
Driv'er, } do-Goth. *drifwa;* Teut
Driv'ing, *n. s.* } *treiben;* from Greek,
Drove, *n. s.* } τρειβω. To chase;
Drov'en, *part.* } to push or impel with
Drov'er, *n. s.* } overcoming force; opposed to draw or drag, in which that which draws or drags goes before; that which drives goes behind or follows the thing driven: hence to force or compel, generally; to aim at; to urge to greater speed; to regulate a carriage, or rather the horses, perhaps; to hurry on; to distress. A drove, from the preterite of drive, is a collective number of things or animals driven: hence a crowd or tumult of persons. Droven, the old past participle of drive. A drover, one who habitually drives animals, or feeds them to be driven to market. Spenser uses it for a boat driven 'along the stream.'

For the charite of Crist *dryueth* us, gessynge this thing, that if oon diede for alle, thanne alle weren deede. *Wiclif. 2 Cor.* v.

But if questions ben of the word, and of names of ghoure lawe bise ghousilff, I will not be domesman of these thingis, and he *droof* hem fro the doom place. *Id. Dedis.* 18.

And the watchman told, saying, the *driving* is like the *driving* of Jehu, the son of Nimshi, for he *driveth* furiously. *Bible*, 2 *Kings* ix. 20.

They were *driven* forth from among men. *Job* xxx. 5.

He stood and measured the earth: he beheld, and *drove* asunder the nations. *Hab.* iii. 6.

And fro the benche he *drove* away the cat,
And laid adoun his potent and his hat,
And eke his scrip, and set himself adoun.
Chaucer. Cant. Tales.

For the metre sake, some words in him sometime be *driven* awry, which require straighter placing in plain prose. *Ascham.*

This kind of speech is in the manner of desperate men far *driven*. *Spenser's State of Ireland.*

To *drive* the deer with hound and horn
Earl Percy took his way. *Chevy Chase.*

The Romans did not think that tyranny was thoroughly extinguished, till they had *driven* one of their consuls to depart the city, against whom they found not in the world what to object, saving only that his name was Tarquin. *Hooker.*

He from the many-peopled city flies;
Contemns their labours, and the *driver's* cries.
Sandys.

They forthwith *drave* out their governour, and received the Turks into the town. *Knolles's History.*

Four rogues in buckram let *drive* at me.
Shakspeare. Henry IV.

Time *drives* the flocks from field to fold,
When rivers rage and rocks grow cold.
Shakspeare.

I *drave* my suitor from his mad humour of love to a living humour of madness.
Id. As You Like It.

His thrice *driven* bed of down. *Shakspeare.*

This is fought indeed;
Had we so done at first, we had *droven* them home
With clouts about their heads. *Id.*

The prince hath got your Hero.
—— I wish him joy of her.
— Why, that 's spoken like an honest *drover*; so they sell bullocks. *Id. Much Ado About Nothing.*

As a farmer cannot husband his ground so well, if he sit at a great rent; so the merchant cannot *drive* his trade so well, if he sit at great usury. *Bacon.*

The experiment of wood that shineth in the dark, we have diligently *driven* and pursued; the rather for that, of all things that give light here below, it is the most durable, and hath least apparent motion.
Id. Natural History.

They brought to their stations many *droves* of cattle; and within a few days were brought out of the country two thousand muttons. *Hayward.*

Discontents *drave* men into slidings.
King Charles.

We have thus the proper notions of the four elements, and both them and their qualities *driven* up and resolved into their most simple principles.
Digby on Bodies.

He *drave* them beyond Amon's flood,
And their sad bounds marked deep in their own blood.
Cowley.

Most miserable if such unskilfulness make them *drive* on their time by the periods of sin and death.
Taylor.

Lord Cottington, being master of temper, and of the most profound dissimulation, knew too well how to lead him into a mistake, and then *drive* him into choler. *Clarendon.*

Thy flaming chariot-wheels, that shook
Heaven's everlasting frame, while o'er the necks
Thou *drov'st* of warring angels disarrayed. *Milton.*

The sounds and seas, with all their finny *drove*,
Now to the moon in wavering morrice move. *Id.*

A Spaniard is unacquainted with our northern *droves*. *Browne.*

Authors *drive* at these, as the highest elegancies, which are but the frigidities of wit.
Id. Vulgar Errours.

He taught the gospel rather than the law,
And forced himself to *drive*, but loved to draw.
Dryden

Love, fixt to one, still safe at anchor rides,
And dares the fury of the winds and tides;
But losing once that hold, to the wide ocean born,
It *drives* away at will, to every wave a scorn. *Id.*

Fierce Boreas *drove* against his flying sails,
And rent the sheets. *Id. Æneid.*

Perithous' dart *drove* on, and nailed him to the wood. *Dryden.*

Your Pasimond a lawless bargain *drove*,
The parent could not sell the daughter's love. *Id.*

Fate has *driven* 'em all
Into the net. *Id. Don Sebastian.*

Not the fierce *driver* with more fury lends
The sounding lash, and, ere the stroke descends,
Low to the wheels his pliant body bends.
Id. Virgil.

But if to fame alone thou dost pretend,
The miser will his empty palace lend,
Set wide with doors, adorned with plated brass,
Where *droves*, as at a city-gate, may pass.
Id. Juvenal.

The *drover*, who his fellow *drover* meets
In narrow passages of winding streets. *Id.*

The wolves scampered away, however, as hard as they could *drive*. *L'Estrange.*

The one 's in the plot, let him be never so innocent; and the other is as white as the *driven* snow, let him be never so criminal. *Id.*

He, *driven* to dismount, threatened, if I did not the like, to do as much for my horse as fortune had done for his. *Sidney.*

It is better to marry than to burn, says St. Paul; where we may see what *drives* men into a conjugal life: a little burning pushes us more powerfully than greater pleasures in prospect. *Locke.*

The multitude or common rout, like a drove of sheep, or an herd of oxen, may be managed by any noise or cry which their *driver* shall accustom them to.
South.

There find a herd of heifers, wandering o'er
The neighbouring hill, and *drive* 'em to the shore.
Addison.

We have done our work, and are come within view of the end that we have been *driving* at.
Id. on the War.

To *drive* the argument farther, let us inquire into the obvious designs of this divine architect.
Cheyne's Philos. Principles.

The trade of life cannot be *driven* without partners.
Collier.

The design of these orators was to *drive* some particular point, either the condemnation or acquittal.
Swift.

He builds a bridge, who never *drove* a pile. *Pope.*

Thick as autumnal leaves, or *driving* sand,
The moving squadrons blacken all the strand.
Id. Iliad.

The foe rushed furious as he pants for breath,
And through his navel *drave* the pointed death. *Id.*

Or when the country floats with sudden rains,
Or *driving* mists deface the moistened plains,
In vain his toils the' unskilful fowler tries,
While in thick woods the feeding partridge lies.
Gay.

First joyless rains obscure
Drive thro' the mingling skies with vapour foul,
Dash on the mountain's brow, and shake the woods
That grumbling wave below. *Thomson.*

Of plain sound sense life's current coin is made;
With that we *drive* the most substantial trade.
Young.

He that by the plough would thrive,
Himself must either hold or *drive*. *Franklin.*

May He who gives the rain to pour,
And wings the blast to blaw,
Protect thee frae the *driving* shower,
The bitter frost and snaw! *Burns.*

DRIVING, among sportsmen, a method of taking pheasant powts. The sportsman having found out the haunts of these birds, and fixed his nets there, he calls upon them together by a pheasant call, imitating the voice of the dam; after this he makes a noise with his driver, which will make them run a little way forward in a cluster; and this he repeats till he has made sure of them, by driving them into his nets.

DRIVING, in metallurgy, is said of silver, when, in the operation of refining, the lead being burnt away, the remaining copper rises upon its surface in red fiery bubbles.

DRIVING, in the sea language, is said of a ship, when an anchor being let fall will not hold her fast, nor prevent her falling away with the wind or tide. The best help in this case is to let fall more anchors, or to veer out more cable; for the more cable she has out, the safer she rides. When a ship is a-hull or a-try, they say she drives to leeward.

DRIV'EL, *v. n.* & *n. s.* } Goth. *drafla*; Icel.
DRIV'ELLER, *n. s.* } *drafa*, to talk wildly, whence Teut. *ravelen*, to dote. To be weak; foolish: hence to slaver like a child or idiot. The substantive, drivel, saliva, is derived from the verb. A driveller is a dastard; fool; idiot.

This *driveling* love is like a great natural, that runs lolling up and down to hide his bauble.
Shakspeare. Romeo and Juliet.

No man could spit from him, but would be forced to *drivel* like some paralytick, or a fool. *Grew.*

Besides the' eternal *drivel*, that supplies
The dropping beard, from nostrils, mouth, and eyes.
Dryden.

I hate to see a brave bold fellow sotted,
Made sour and senseless, turned to whey, by love
A *driveling* hero, fit for a romance. *Id.*

What fool am I, to mingle that *drivel's* speeches among my noble thoughts. *Sidney.*

I met with this Chremes, a *driveling* old fellow, lean, shaking both of head and hands, already half earth, and yet then most greedy of earth. *Id.*

I have heard the arrantest *drivellers* commended for their shrewdness, even by men of tolerable judgment.
Swift.

All pay themselves the compliment to think
They, one day, shall not *drivel*: and their pride
On this reversion takes up ready praise. *Thomson.*

In life's last scene what prodigies surprise,
Fears of the brave, and follies of the wise!
From Marlborough's eyes the streams of dotage flow,
And Swift expires a *driveller* and a show.
Johnson. Vanity of Human Wishes.

Ye writers of what none with safety reads,
Footing it in the dance that fancy leads:
Ye novelists, who mar what ye would mend,
Sniveling and *driveling* folly without end.
Cowper.

DRIVERS, among sportsmen, a machine for driving pheasant powts, consisting of good strong ozier wands, such as the basket-makers use, set in a handle, and twisted or bound with small oziers in two or three places. With this instrument the sportsman drives the young powts into his nets.

DRIZZLE, *v. a.* & *v. n.* } Goth. *driusan*;
DRIZZLY, *adj.* } Germ. *driseler*, from Lat. *ros*; Gr. δροσος, dew. To shed or fall in small drops: drizzly is shedding small rain.

And *drizzling* drops, that often do redound,
The firmest flint doth in continuance wear.
Spenser.

Her heart did melt in great compassion,
And *drizzling* tears did shed for pure affection.
Faerie Queene.

When the sun sets, the air doth *drizzle* dew.
Shakspeare.

This day will pour down,
If I conjecture aught, no *drizzling* shower,
But rattling storm of arrows barbed with fire.
Milton.

This during winter's *drizzly* reign be done,
Till the new ram receives the exalted sun.
Dryden's Virgil.

The neighbouring mountains, by reason of their height, are more exposed to the dews and *drizzling* rains than any of the adjacent parts.
Addison on Italy.

But if perchance on some dull *drizzling* day
A thought intrude, that says, or seems to say,
If thus the' important cause is to be tried,
Suppose the beam should dip on the wrong side;
I soon recover from these needless frights,
And God 'is merciful—sets all to rights. *Cowper.*

DROGDEN CHANNEL, a channel between the islands of Amak and Saltholm, and the only safe passage for ships of the line into the Baltic. It is about five miles in length, commencing opposite the road of Copenhagen, and there consisting of two channels, divided by a sand-bank. The inner, which is called Kongedyl (the royal passage), is commanded by the cannon of Copenhagen, and was the scene of the engagement 2d of April, 1801, between the Danes and English.

DROGHEDA, anciently called Tredagh, is a post, market, and fair town in Ireland, distant twenty-nine miles from Dublin. It is situated on the river Boyne, the natural boundary of the counties of Meath and Louth, and is in the county of the town of Drogheda; it is governed by a recorder, a mayor, two sheriffs, twenty-four aldermen, the sheriffs' peers, and fourteen representatives from the guilds. Drogheda was formerly a town of much consideration; the privilege of coinage was once granted to it, and in the reign of Edward IV. an act passed the Irish parliament, for the foundation of an university here, with like privileges as Oxford, which act remains still unrepealed. In 1641

this place was besieged by the rebels, but after suffering considerably, was at length gallantly relieved by Sir Henry Tichbourne. Cromwell afterwards stormed and captured it, and left an everlasting remembrance of his sanguinary character here, in the massacre of its unarmed inhabitants: St. Lawrence's gate and tower are the chief remains of the ancient fortifications. About four miles from Drogheda, on the river Boyne, is the passage of Oldbridge, celebrated as being the scene of the memorable engagement between William III. and James in 1690, usually called the battle of the Boyne. A handsome obelisk is erected on the spot.

Drogheda returns one member to the imperial parliament. The principal public buildings are the Tholsel, a very elegant structure: the churches of St. Peter's and St. Mary's; five Roman Catholic chapels, and two meeting-houses. There are also large assembly-rooms, and a public reading-room. The gaol is a fine building, lately erected at an expense of £12,000. There is an infantry barrack in the town, and a magazine on a hill called Millmount, on the Meath side of the river. The principal trade of this place consists in the sale of dowlass, from twenty-six to thirty inches wide: sheeting of a superior quality was once the staple, but it has lost the reputation of manufacturing the best description of that article. Much corn is exported, and coal imported, which latter is conveyed by means of the Boyne navigation to Navan, whence the interior of Meath is conveniently supplied. The harbour of Drogheda is capable of much improvement: the great obstruction to the navigation is a bank called Tickel's Bed; by cutting through this, which could be done for a small sum, four feet water would be gained over the bar and up to the quay. There is but one bridge in Drogheda, and this is dangerously narrow. Amongst the valuable institutions are the classical school (one of very high character), founded by Sir Erasmus Smith; the blue school, supported by the corporation; an alms-house, affording shelter and partial support to twenty-four widows; an asylum for thirty-six clergymen's widows, to each of whom £26 annually are allowed: this is supported by bequests of primates Marsh and Bolter. There are many other valuable charities and institutions in this town. The export trade is tolerably flourishing, and to the establishment of steam-packets, which has already taken place, the harbour improvement above-mentioned only requires to be added, to make it the medium of importation to the midland counties.

DROIL, *n. s.* & *v. n.* A contraction of drivel. A drone; a sluggard: hence to work sluggishly or slowly; to plod.

Let such vile vassals, born to base vocation,
Drudge in the world, and for their living *droil*,
Which have no wit to live withouten toyle.
Spenser.

Desuetude does contract and narrow our faculties, so that we can apprehend only those things in which we are conversant; the *droiling* peasant scarce thinks there is any world beyond the neighbouring markets.
Government of the Tongue.

DROITWICH, a town of England, in the county of Worcester, containing three churches, and about 400 houses. It is noted for excellent white salt, made from the salt-springs in its neighbourhood; amounting to about 700,000 bushels a year. This town, anciently called Diertwich, from its wet dirty appearance, is seated on the navigable river Salwarp. It appears to have been a populous place in the reign of William the Conqueror, and has always been particularly celebrated for its immense salt-springs, whereof mention is made in Domesday-Book. A canal has been made from this town to the Severn, about three miles from Worcester, for the purpose of conveying the salt. It has a weekly market on Friday, and sends two members to parliament. The right of election is in two bailiffs, the recorder, and eleven burgesses, who are styled the corporation of the salt-springs of Droitwich. The bailiffs are the returning officers, and justices of the quorum: the recorder is also a justice of the peace. It is seven miles E. N. E. of Worcester, and 118 W. N. W. of London.

DROLL, *n. s.*, *v. n.*, *v. a.* & *adj.* Fr. *drôle*; Arm. *drew*.
DROL'LER, *n. s.* } A jester; buffoon: hence to play the buffoon, or jester; to cheat; trick: and, as an adjective, ridiculous; odd.
DROL'LERY,
DROL'LING,
DROLL'HOUSE.

There is nothing so disagreeable in works of humour, as an insipid, unsupported vivacity, the very husks of *drollery*, bottled small beer, a man out-riding his horse, lewdness and impotence, a fiery actor in a phlegmatic scene, an illiterate and stupid preacher discoursing upon Urim and Thummim, and beating the pulpit cushion in such a manner, as though he would make the dust and the truth fly out of it at once.
Shenstone.

He is making an experiment by another sort of enemies, and sets the apes and *drollers* upon it.
Glanville.

Such august designs as inspire your inquiries, used to be decided by *drolling* fantasticks, that have only wit enough to make others and themselves ridiculous.
Id.

As he was running home in all haste, a *droll* takes him up by the way. *L'Estrange.*

Men that will not be reasoned into their senses, may yet be laughed or *drolled* into them. *Id.*

Let virtuosos insult and despise on, yet they never shall be able to *droll* away nature. *South.*

The vulgar may swallow any sordid jest; any mere *drollery* or buffoonery; but it must be a finer and truer wit which takes with men of sense and good breeding. *Shaftesbury.*

Italy may have the preference of all other nations for history painting; Holland for *drolls* and a neat finished manner of working; France for gay, jaunty, fluttering pictures; and England for portraits.
Spectator.

Democritus, dear *droll!* revisit earth,
And with our follies glut thy heightened mirth.
Prior.

Some as justly fame extols,
For lofty lines in Smithfield *drolls*. *Swift.*

They hang between heaven and hell, borrow the christian's faith, and the atheist's *drollery* upon it.
Government of the Tongue.

Should the senate-house, where all our lawgivers assemble, be used for a theatre or *droll-house*, or for idle puppet shows? *Watts.*

DROME, a river of France, in Dauphiny, which rises near the entrance of the Val de Drome, on the borders of the department of the Upper Alps, and which, rapidly traversing the department of its own name from east to west, falls into the Rhone between Montelimart and Valence. It is partially navigable.

DROME, a department of France, so named from the foregoing river, comprehends the south-west part of Lower Dauphiny, and is bounded by the departments of the Isere, Upper Alps, Lower Alps, and Vaucluse: the Rhone bounds it on the west. It contains a population of 253,500, among whom there are 34,000 Protestants. The country is high, full of mountains and valleys, and is watered by the Rhone, the Isere, the Drome, and several inferior rivers. In the valley of the Rhone, the mulberry, the almond, the chestnut, walnut, and in some places the olive, are found to thrive; and though the climate is cold, wine is a staple production, particularly the kinds called Hermitage and Vin de Nyons. Corn is imported yearly to a considerable amount. The stock of cattle is not considerable, the pasturages being for the most part appropriated to the herds of Provence. Wood is in abundance. The manufactures are in the larger towns are linen, woollen, and cotton works. The exports consist of wine, silk, olive and nut oil, and almonds.

DROM'EDARY, *n.* Fr. *dromadaire;* Ital. Span. and Port. *dromedario;* Lat. *dromedarius;* Gr. δρομας, from δρομος, a course, on account of the swiftness of its course. An animal of the CAMELUS species, which see.

Straw for the horses and *dromedaries* brought they unto the place. 1 *Kings.*

Mules, after these camels and *dromedaries,*
And waggons fraught with utensils of war.
Milton.

A sort of camel so called from its swiftness, because it is said to travel a hundred miles a-day. *Dromedaries* are smaller than common camels, slenderer, and more nimble. *Calmet.*

Or let me have the long
And patient swiftness of the desart-ship:
The helmless *dromedary;*—and I'll bear
Thy fiendish sarcasm with a saintly patience.
Byron.

DROMORE, a town of Ireland, in the county of Down. It is a very ancient town, and the seat of a bishopric. The see was founded by St. Colman in the sixth century. It was refounded by king James I., who, by his charters (preserved in the rolls office), granted it very great privileges. Among other marks of royal favor, he distinguished the bishops of this see by the style of 'A. B., by Divine Providence bishop of Dromore;' whereas all other bishops in Ireland, except those of Meath and Kildare, are styled 'by Divine Permission.' Dromore lies seventeen miles east of Armagh, and fifteen south-west of Belfast.

DRONE, *n. s.* & *v. n.* } Belgic *droomigh,*
DRON'ISH, *adj.* } (sleepy).—Minsheu.
DRONE'PIPE. } Sax. drane of drygan, to expel.—H. Tooke. Serenius says, of Sax. droen, to murmur. The bee which makes no honey and only murmurs: hence also a murmuring noise; an idler; a sluggard. To drone is to live idly; to make a low humming noise: dronish, idle, lazy, sluggish.

There is a great number of noblemen among you, that are themselves as idle as *drones;* that subsist on other men's labour, on the labour of their tenants, whom, to raise their revenues, they pare to the quick. *Sir T. More.*

The sad-eyed justice, with his surly hum,
Delivering o'er to executors pale
The lazy yawning *drone.* *Shakspeare.* *Henry V.*

Sit idle on the household hearth,
A burdenous *drone,* to visitants a gaze. *Milton.*

What have I lost by my forefather's fault!
Why was I not the twentieth by descent
From a long restive race of *droning* kings?
Dryden.

Melfoil and honeysuckles pound,
With these alluring savours strew the ground,
And mix with tinkling brass the cymbal's *droning* sound. *Id.*

All, with united force, combine to drive
The lazy *drones* from the laborious hive.
Id. Virgil.

Luxurious kings are to their people lost;
They live, like *drones,* upon the publick cost.
Id. Aurengzebe.

It is my misfortune to be married to a *drone,* who lives upon what I get, without bringing any thing into the common stock. *Addison.*

The *dronish* monks, the scorn and shame of manhood,
Rouse and prepare once more to take possession,
To nestle in their ancient hives again. *Rowe.*

Here while his canting *drone-pipe* scanned
The mystic figures of her hand,
He tipples palmestry, and dines
On all her fortune-telling lines. *Cleaveland.*

You speak with life, in hopes to entertain,
Your elevated voice goes through the brain;
You fall at once into a lower key,
That's worse—the *drone-pipe* of an humble-bee.
Cowper.

Cobwebs for little flies are spread,
And laws for little folks are made;
But if an insect of renown,
Hornet or beetle, wasp or *drone,*
Be caught in quest of sport or plunder,
The flimsy fetter flies in sunder. *Beattie.*

DRONTHEIM, a town and province of Norway, formerly the capital, and the usual residence of the kings, situated on a gulf of the North Sea. It is nearly surrounded by the ocean and lofty mountains; and has a well-frequented sea-port, which however is not capable of receiving large vessels, on account of rocks at the entrance of the harbour. It is still a bishop's see, is enclosed by a wall, and defended by a castle by no means strong. The houses are mostly of wood. Near it are mines of copper and silver. The principal exports are masts, fir timber, copper, iron, pitch, tar, stock-fish, skins, pot-ash, &c. In exchange, they receive and import spices, wines, salt, brandy, corn, tobacco, cloth, &c. It is 270 miles north-west of Stockholm. Long. 11° 9′ E., lat. 63° 26′ N. The province of Drontheim is the most northern of the four grand bailliages or dioceses of Norway, and situated on the west coast, between

lergen, Aggerhuus, the Swedish frontier, and lorrland. In its widest extent it comprises oth the last-mentioned province and Finnmach.)rontheim Proper includes eighty-six parishes, ith the four towns of Drontheim, Roraas, hristiansand, and Molde. The population of is district has received a marked increase uring the last half century; in 1769 it was 05,238, and in 1814, 138,690: including Norrnd and Finnmark, the number in 1801 was 39,215. Though full of mountains, and little dapted for cultivation, the progress of rural conomy has been of late years very considerble.

DROOP, *v. n.* Dut. *droef* (sorrow); Sax. repen; Isl. *diupa*, from drop, almost a cognate ord. To languish; bend in sorrow; sink; ang downwards.

I *droop*, with struggling spent;
My thoughts are on my sorrows bent. *Sandys.*

Conceiving the dishonour of his mother,
He straight declined, *drooped*, took it deeply;
Fastened and fixed the shame on 't in himself.
Shakspeare.

I find my zenith doth depend upon
most auspicious star; whose influence
now I court not, but omit, my fortunes
till ever after *droop*. *Id. Tempest.*

I never from thy side henceforth must stray,
Where'er our day's work lies; though now enjoined
laborious, till day *droop*. *Milton's Paradise Lost.*

His head, though gay,
arnation, purple, azure, or specked with gold,
ung *drooping*, unsustained. *Id.*

Can flowers but *droop* in absence of the sun,
Which waked their sweets? and mine, alas! is gone.
Dryden.

When factious rage to cruel exile drove
The queen of beauty and the court of love,
The muses *drooped* with their forsaken arts. *Id.*

When by impulse from heaven Tyrtæus sung,
drooping soldiers a new courage sprung.
Roscommon.

I'll animate the soldiers' *drooping* courage
With love of freedom and contempt of life.
Addison's Cato.

I saw him ten days before he died, and observed began very much to *droop* and languish. *Swift.*

On her heaved bosom hung her *drooping* head,
Which with a sigh she raised, and this she said.
Pope.

With secret sighs the virgin lily *droops*,
And jealous cowslips hang their tawny cups.
Darwin.

Isa. Nay, Don Jerome, you promised her forgiveness; see how the poor creature *droops!*
Jer. *Droops*, indeed! Why, gad take me, this is d Margaret—but where's my daughter, where's ouisa? *Sheridan.*

Little he cared how sped the bower,
And little marked the *drooping* flower,
But wandering through the bushy brake,
Thus in bewildered accents spake. *Id.*

I see before me the Gladiator lie:
He leans upon his hand—his manly brow
Consents to death, but conquers agony,
And his *drooped* head sinks gradually low—
And through his side the last drops, ebbing slow
From the red gash, fall heavy. *Byron.*

The winds were pillowed on the waves,
The banners *drooped* along their staves,
And, as they fell around them furling,
Above them shone the crescent curling. *Id.*

DROP, *v. a., v. n.* & *n. s.* } Goth. *droppa;*
Drop'let, } Saxon dropian;
Drop'ping, *n. s.* } Germ. and Dutch *dropfen;* Swed. and Dan. *dryppe*. To let fall in small particles; hence let go; quit; speak casually; intermit; suffer to vanish or expire: as a neuter verb, to fall in drops; hence to fall generally; to come casually; to sink, die. Droplet is a diminutive of drop.

His heavens shall *drop* down dew.
Deut. xxxiii. 28.

The heavens *dropped* at the presence of God.
Psalm lxvii. 8.

Drop not thy word against the house of Isaac.
Amos.

It was your presurmise,
That in the dole of blows your son might *drop*.
Shakspeare.

The quality of mercy is not strained;
It *droppeth* as the gentle rain from heaven
Upon the place beneath.
Id. Merchant of Venice.

Meet we the med'cine of our country's weal,
And with him pour we, in our country's purge,
Each *drop* of us. *Id. Macbeth.*

Though I could
With barefaced power sweep him from my sight,
And bid my will avouch it; yet I must not,
For certain friends that are both his and mine,
Whose loves I may not *drop*. *Id.*

Thou abhorredst in us our human griefs,
Scorned our brine's flow, and those our *droplets*, which
From niggard nature fall. *Id. Timon.*

Thrifty wench scrapes kitchen-stuff,
And barrelling the *droppings* and the snuff
Of wasting candles. *Donne.*

Nothing, says Seneca, so soon reconciles us to the thoughts of our own death, as the prospect of one friend after another *dropping* round us.
Digby to Pope.

So mayest thou live, till, like ripe fruit, thou *drop*
Into thy mother's lap; or be with ease
Gathered, not harshly plucked. *Milton.*

Or sporting, with quick glance,
Shew to the sun their waved coats, *dropped* with gold.
Id.

So thick a *drop* serene hath quenched their orbs,
Or dim suffusion veiled! *Id. Paradise Lost.*

Admiring in the gloomy shade,
Those little *drops* of light. *Waller.*

Whereas Aristotle tells us, that if a *drop* of wine be put into ten thousand measures of water, the wine, being overpowered by so vast a quantity of water, will be turned into it; he speaks very improbably. *Boyle.*

One only hag remained:
Propped on her trusty staff, not half upright,
And *dropped* an awkward courtesy to the knight.
Dryden.

Either you come not here, or, as you grace
Some old acquaintance, *drop* into the place,
Careless and qualmish, with a yawning face. *Id.*

Beneath a rock he sighed alone,
And cold Lycæus wept from every *dropping* stone.
Id.

Had I but known that Sancho was his father,
I would have poured a deluge of my blood
To save one *drop* of his. *Id. Spanish Friar.*

I have beat the hoof till I have worn out these shoes in your service, and not one penny left me to buy more; so that you must even excuse me if I *drop* you here. *L'Estrange.*

The thoughts that come often unsought, and, as it were, *drop* into the mind, are commonly the most valuable of any we have, and therefore should be secured, because they seldom return again. *Locke.*

St. Paul's epistles contain nothing but points of Christian instruction, amongst which he seldom fails to *drop* in the great and distinguishing doctrines of our holy religion. *Id.*

Repentance hath a purifying power, and every tear is of a cleansing virtue; but these penitential clouds must be still kept *dropping*; one shower will not suffice; for repentance is not one single action but a course. *South.*

He could never make any figure in company, but by giving disturbance at his entry: and therefore takes care to *drop* in when he thinks you are just seated. *Spectator*, No. 448.

Thus was the fame of our Saviour perpetuated by such records as would preserve the traditionary account of him to after-ages; and rectify it, if, by passing through several generations, it might *drop* any part that was material. *Addison.*

Virgil's friends thought fit to let *drop* this incident of Helen. *Id. Travels.*

In every revolution, approaching nearer and nearer to the sun, this comet must at last *drop* into the sun's body. *Cheyne.*

Where the act is unmanly or immoral, we ought to *drop* our hopes, or rather never entertain them. *Collier on Despair.*

After having given this judgment in its favour, they suddenly *dropt* the pursuit. *Sharp's Surgery.*

Philosophers conjecture that you *dropped* from the moon, or one of the stars. *Gulliver's Travels.*

St. John himself will scarce forbear
To bite his pen and *drop* a tear. *Swift.*

Opinions, like fashions, always descend from those of quality to the middle sort, and thence to the vulgar, where they are *dropped* and vanish. *Id.*

The *drops* to thee, Brillante, we consign;
And, Momentilla, let the watch be thine. *Pope.*

I heard of threats occasioned by my verses: I sent to acquaint them where I was to be found, and so it *dropped*. *Id.*

Strain out the last dull *droppings* of your sense,
And rhyme with all the rage of impotence. *Id.*

The most affluent may be stript of all, and find his worldly comforts like so many withered leaves *dropping* from him. *Sterne.*

Those who have assumed visible shapes for a season, can hardly be reckoned among this order of compounded beings; because they *drop* their bodies, and divest themselves of those visible shapes. *Watts's Logick.*

Constancy in friendships, attachments, and familiarities, is commendable, and is requisite to support trust and good correspondence in society. But in places of general, though casual concourse, where the pursuit of health and pleasure brings people promiscuously together, public conveniency has dispensed with this maxim; and custom there promotes an unreserved conversation for the time, by indulging the privilege of *dropping* afterwards every indifferent acquaintance without breach of civility or good manners. *Hume.*

Evening now from purple wings
Sheds the grateful gifts she brings;
Brilliant *drops* bedeck the mead,
Cooling breezes shake the reed.
Johnson. Ode to Evening.

Shrouded Nile,
Eridanus, and Tiber with his twins,
And palmy Euphrates: they with *dropping* locks
Hang o'er their urns, and mournfully among
The plaintive-echoing ruins pour their streams.
Byron.

DROPS, in meteorology, small spherical bodies, which the particles of fluids spontaneously form themselves into when let fall from any height. This spherical figure, the Newtonian philosophers demonstrate to be the effect of corpuscular attraction; for, considering that the attractive force of one single particle of a fluid is equally exerted to an equal distance, it must follow, that other fluid particles are on every side drawn to it, and will therefore take their places at an equal distance from it, and consequently form a round superficies. See HYDROSTATICS.

DROP'SY, DROP'SICAL, *adj.* DROP'SIED, *adj.* } Fr. *hydropisie*; Span. and Port. *dropesia*, or *tropesia*; Lat. *hydrops*; Gr. *ὑδρωψ*, from *ὑδωρ*, water. A disease which accumulates water in different parts of the body. See below.

Where great addition swells, and virtue none,
It is a *dropsied* honour: good alone
Is good. *Shakspeare. All's Well that Ends Well.*

There note they the ship's sicknesses, the mast
Shaked with an ague, and the hold and waist
With a salt *dropsie* clogged. *Donne.*

Revenge, that thirsty *dropsy* of our souls,
Which makes us covet that which hurts us most,
Is not alone sweet, but partakes of tartness.
Massinger.

The diet of nephritick and *dropsical* persons ought to be such as is opposite to, and subdueth the alkalescent nature of the salts in the serum of the blood. *Arbuthnot on Aliments.*

A tendency to these diseases is certainly hereditary, though perhaps not the diseases themselves; thus a less quantity of ale, cyder, wine, or spirit, will induce the gout and *dropsy* in those constitutions, whose parents have been intemperate in the use of those liquors; as I have more than once had occasion to observe. *Darwin.*

She likewise hinted that a certain widow in the next street had got rid of her *dropsy*, and recovered her shape in a most surprising manner. *Sheridan.*

DROPSY (*ὑδρωψ*), a collection of a serous fluid in the cellular membrane, the viscera, or other cavities of the body. For the general description of this disease, see HYDROPS; for dropsy of the belly, see ASCITES; for dropsy of the brain, HYDROCEPHALUS; for dropsy of the chest, HYDROTHORAX; for dropsy of the skin, ANASARCA; for dropsy of the testicle, HYDROCELE.

DROSERA, ros solis, or sun-dew, in botany, a genus of the pentagynia order, and pentandria class of plants; natural order fourteenth, gruinales: CAL. quinquefid, petals five: CAPS. unilocular, and quinquevalved at top: SEEDS very numerous. Species eleven, which grow naturally in boggy places, in many parts of the kingdom. They are named sun-dew from a very striking circumstance in their appearance. The leaves, which are circular, are fringed with hairs, supporting small drops or globules of a pellucid liquor like dew, which continue even in the hottest part of the day, and in the fullest exposure to the sun. The whole plant is acrid, and sufficiently caustic to erode the skin; but some ladies

know how to mix the juice with milk, so as to make it an innocent and safe application to remove freckles and sun-burn. The juice that exudes from it unmixed, will destroy warts and corns.

DROSOMELI, δροσόμελι, from δρόσος, dew, and μέλι, honey; manna.

DROSS, *n. s.* } Sax. drof; Goth. *drits*; Belg.
DROSS'INESS, } *droes*, from ancient Teut. *drausen*, the exterior. The recre-
DROSSY, *adj.* } ment of metals; and hence, rust, refuse.

Fair proud, now tell me why should fair be proud,
Sith all world's glory is but *dross* unclean:
And in the shade of death itself shall shroud,
However now thereof ye little ween? *Spenser.*

Some scummed the *dross* that from the metal came,
Some stirred the molten ore with ladles great,
And every one did swink, and every one did sweat.
Id.

Should the mixture of a little *dross* constrain the church to deprive herself of so much gold, rather than learn how, by art and judgment, to make separation of the one from the other? *Hooker.*

That most divine light only shineth on those minds which are purged from all worldly *dross* and human uncleanness. *Raleigh.*

So doth the fire the *drossy* gold refine. *Davies.*

Your intention hold,
As fire these *drossy* rhymes to purify,
Or as elixir to change them into gold. *Donne.*

For, by the fire, they emit not only many *drossy* and scorious parts, but whatsoever they had received either from earth or loadstone.
Browne's Vulgar Errours.

All treasures and all gain esteem as *dross*,
And dignities and powers, all but the highest.
Milton.

Avarice is of all passions the most sordid, the most clogged, and covered with dirt and with *dross*, so that it cannot raise its wings beyond the smell of the earth.
Sir W. Temple.

The furnace of affliction refines us from earthly *drossiness*, and softens us for the impression of God's stamp. *Boyle.*

An emperor, hid under a crust of *dross*, after cleansing, has appeared with all his titles fresh and beautiful. *Addison.*

Such precepts exceedingly dispose us to pity and religion, by purifying our souls from the *dross* and filth of sensual delights. *Tillotson.*

We have from nature only what we cannot provide for ourselves; she gives us wild fruits which art must meliorate, and *drossy* metals which labour must refine.
Johnson. Thoughts on Agriculture.

Great skill have they in palmistry, and more
To conjure clean away the gold they touch,
Conveying worthless *dross* into its place. *Cowper.*

DROTCHEL, *n. s.* Corrupted perhaps from *dretchel*. To dretch, in Chaucer, is to idle, to delay. *Droch*, in Frisick, is delay. An idle wench; a sluggard. In Scotland it is still used.

DROUGHT, *n. s.* } From Sax. drygan, to
DROUGHT'Y, *adj.* } dry. This word is evidently a corruption of dryth, as it was anciently written; it next became drowth, and, lastly, drought. Dry weather; want of rain; thirst; want of drink.

As torrents in the *drowth* of summer fail,
So perished man from death shall never rise.
Sandys.

O earth! I will befriend thee more with rain
Than youthful April shall with all his showers:
In summer's *drought* I'll drop upon thee still.
Shakspeare.

Great *droughts* in summer, lasting till the end of August, some gentle showers upon them, and then some dry weather, portend a pestilent summer the year following. *Bacon.*

To south the Persian bay,
And inaccessible the' Arabian *drought*. *Milton.*

One, whose *drought*
Yet scarce allayed, still eyes the current stream,
Whose liquid murmur heard new thirst excites.
Id.

They were so learned in natural philosophy, that they foretold earthquakes and storms, great *droughts*, and great plagues. *Temple.*

In a *drought*, the thirsty creatures cry,
And gape upon the gathered clouds for rain.
Dryden.

Upon a shower, after a *drought*, earthworms and land-snails innumerable come out of their lurking-places. *Ray.*

If the former years
Exhibit no supplies, alas! thou must
With tasteless water wash thy *droughty* throat.
Philips.

O ye wild groves, O where is now your bloom!
(The Muse interprets thus his tender thought)
Your flowers, your verdure, and your balmy gloom,
Of late so grateful in the hour of *drought*! *Beattie.*

DROWN, *v. a.* & *v. n.* From. Germ. *drunden*, below.—Skinner. From Sax. druncnian.—Mr. Lye. Teut. *trauken*; Swed. *dranka*. To suffocate in water; sink; immerge in water; and hence to lose in something that overpowers; to be suffocated with water.

There be, that keep them out of fire, and yet was never burned; that beware of water, and yet was never nigh *drowning*. *Ascham's Schoolmaster.*

Who cometh next will not follow that course however good, which his predecessors held, for doubt to have his doings *drowned* in another man's praise.
Spenser on Ireland.

Methought what pain it was to *drown*!
What dreadful noise of waters in my ears!
Shakspeare.

Or so much as it needs
To dew the sovereign flower, and *drown* the weeds.
Id.

Galleys might be *drowned* in the harbour with the great ordnance, before they could be rigged.
Knolles's History.

Most men being in sensual pleasures *drowned*,
It seems their souls but in their senses are. *Davies.*

That the brightness of the sun doth *drown* our discerning of the lesser lights, is a popular errour.
Wotton.

They would soon *drown* those that refused to swim down the popular stream. *King Charles.*

Here was nothing but a majestical terror in the eyes, in the ears of the Israelites.—Here was lightning darted in their eyes, the thunders roaring in their ears, the trumpet of God *drowning* the thunder claps, the voice of God out-speaking the trumpet of the angel.
Bp. Hall. Contemplations.

Whatever he (an obstinate man) lays hold on, like a *drowning* man, he never loses, though it do but help him to sink the sooner. *Butler.*

Betwixt the prince and parliament we stand,
The barriers of the state on either hand:
May neither overflow, for then they *drown* the land.
Dryden.

My private voice is *drowned* amid the senate.
Addison.

When of God's image only eight he found
Snatched from the watery grave, and saved from nations *drowned*. *Prior.*

The innocent gambols of a few otters have been known to occasion those yells, which the vulgar of this country mistake for laughing or crying, and ascribe to a certain goblin, who is supposed to dwell in the waters, and to take delight in *drowning* the bewildered traveller. *Beattie.*

Care, mad to see a man sae happy,
E'en *drowned* himsel amang the nappy;
As bees flee hame wi' lades o' treasure,
The minutes winged their way wi' pleasure.
Burns.

Thus *drownings* are much talked of by the divers,
And swimmers who may chance to be survivers.
Byron.

DROWNING, the extinction of life by a total immersion in water. In some respects, there seems to be a great similarity between the death occasioned by immersion in water, and that by strangulation, suffocation by fixed air, apoplexies, epilepsies, sudden faintings, violent shocks of electricity, or even violent falls and bruises. Physicians, however, are not agreed with regard to the nature of the injury done to the animal system, in any or all of these accidents. It is indeed certain that, in all the cases above mentioned, particularly in drowning, there is very often such a suspension of the vital powers, as to us has the appearance of a total extinction of them; while yet they may be again set in motion, and the person restored to life, after a much longer submersion than has been generally thought capable of producing absolute death.

The length of time during which a person may remain in water without being drowned, is very unequal in different individuals; and depends as much on the temperature of the water as on the particular constitution of the subject: in general, however, there is less prospect of recovery, after having continued fifteen minutes immersed in water. In such cases, death ensues from impeded respiration, and the consequent ceasing of the circulation of the blood, by which the body loses its heat, and, with that, the activity of the vital principle. Dr. Goodwyn justly observes, that the water produces all the changes which take place in drowning, only indirectly, by excluding the atmospheric air from the lungs, as they admit but a very inconsiderable quantity of fluid to pass into them, during immersion. Hence we shall find, in the progress of this enquiry, that inflation of the lungs is one of the principal means of restoring life.

Notwithstanding the differences in theory among physicians, it is certain, that great numbers of drowned people have been restored to life, by a proper use of remedies; and societies for recovering drowned persons have been instituted in different places. The first society of this kind was instituted in Holland, where, from the great abundance of canals and inland seas, the inhabitants are particularly exposed to accidents by water. In a very few years 150 persons were saved from death by this society; and many of these had continued upwards of an hour without any signs of life, after they had been taken out of the water. The society was instituted at Amsterdam in 1767: and, by an advertisement, informed the inhabitants of the United Provinces of the methods proper to be used on such occasions, offering rewards at the same time to those who should, with or without success, use those methods for recovering persons drowned and seemingly dead. The laudable and humane example of the Dutch was followed, in 1768, by the magistrates of health in Milan and Venice; afterwards by the magistrates of Hamburg in 1771, by those of Paris in 1772, and by those of London in 1774. Similar societies have since been instituted at Leith, Glasgow, Aberdeen, and many other places.

The Royal Humane Society of London has circulated the following directions on this important subject:—I. As soon as the patient is taken out of the water, the wet clothes, if the person is not naked at the time of the accident, should be taken off with all possible expedition on the spot (unless some convenient house be very near), and a great coat or two, or some blankets if convenient, should be wrapped round the body. II. The patient is to be thus carefully conveyed in the arms of three or four men, or on a bier, to the nearest public or other house, where a good fire, if in the winter season, and a warm bed, can be made ready for its reception. As the body is conveying to this place, great attention is to be paid to the position of the head; it must be kept supported in a natural and easy posture, and not suffered to hang down. III. In cold or moist weather, the patient is to be laid on a mattress or bed before the fire, but not too near, or in a moderately heated room: in warm or sultry weather, on a bed only. The body is then to be wrapped as expeditiously as possible with a blanket, and thoroughly dried with warm coarse cloths or flannels. IV. In summer or sultry weather too much air cannot be admitted. For this reason it will be necessary to set open the windows and doors, as cool refreshing air is of the greatest importance in the process of resuscitation. V. Not more than six persons are to be present to apply the proper means; a greater number will be useless, and may retard, or totally prevent, the restoration of life, by rendering the air of the apartment unwholesome. It will be necessary, therefore, to request the absence of those who attend merely from motives of curiosity. VI. It will be proper for one of the assistants, with a pair of bellows of the common size, applying the pipe a little way up one nostril, to blow with some force, in order to introduce air into the lungs; at the same time the other nostril and the mouth are to be closed by another assistant, whilst a third person gently presses the chest with his hands, after the lungs are observed to be inflated. By pursuing this process, the noxious and stagnated vapors will be expelled, and natural breathing imitated. If the pipe of the bellows be too large, the air may be blown in at the mouth, the nostrils at the same time being closed, so that it may not escape that way: but the lungs are more easily filled, and natural breathing better imitated, by blowing up the nostril. VII. Let the body be gently rubbed with common salt, or with flannels,

sprinkled with spirits, as rum or geneva. Dr. Fothergill of Bath advises mustard moistened with spirits. A warming-pan heated (the body being surrounded with flannel) may be lightly moved up and down the back. Fomentations of hot brandy are to be applied to the pit of the stomach, loins, &c., and often renewed. Bottles filled with hot water, heated tiles covered with flannel, or hot bricks, may be efficaciously applied to the soles of the feet, palms of the hands, and other parts of the body. The temples may be rubbed with hartshorn, and the nostrils now and then tickled with a feather; and snuff, or eau de luce, should be occasionally applied. VIII. Tobacco fumes should be thrown up the fundament; if a fumigator be not at hand, the common pipe may answer the purpose. The operation should be frequently performed, as it is of importance; for the good effects of this process have been experienced in a variety of instances of suspended animation. But should the application of tobacco smoke in this way not be immediately convenient, or other impediments arise, clysters of this herb, or other acrid infusions with salt, &c., may be thrown up with advantage. IX. When these means have been employed a considerable time without success, and any brewhouse or warm bath can be readily obtained, the body should be carefully conveyed to such a place, and remain in the bath, or surrounded with warm grains, for three or four hours. If a child has been drowned, its body should be wiped perfectly dry, and immediately placed in bed between two healthy persons. The salutary effects of the natural vital warmth, conveyed in this manner, have been proved in a variety of successful cases. X. While the various methods of treatment are employed, the body is to be well shaken every ten minutes, in order to render the process of animation more certainly successful; and children, in particular, are to be much agitated, by taking hold of their legs and arms frequently and for a continuance of time. In various instances, agitation has forwarded the recovery of boys who have been drowned, and continued for a considerable time apparently dead. XI. If there be any signs of returning life, such as sighing, gasping, or convulsive motions, a spoonful of any warm liquid may be administered; and if the act of swallowing is returned, then a cordial of warm brandy or wine may be given in small quantities, and frequently repeated. XII. Electricity may be tried by the judicious and skilful, as its application neither prevents nor retards the various modes of recovery already recommended; but, on the other hand, will most probably tend to render the other means employed more certainly and more expeditiously efficacious. This stimulus bids fair to prove an important auxiliary in cases of suspended animation; and therefore deserves the serious regard and attention of the faculty. These methods are to be employed with vigor for three hours or upwards, although no favorable circumstances should arise; for it is a dangerous opinion to suppose that persons are irrecoverable, because life does not soon make its appearance; an opinion that has consigned to the grave an immense number of the seemingly dead, who might have been restored to life by resolution and perseverance. Bleeding is never to be employed in such cases, unless by the direction of one of the medical assistants, or some other gentleman of the faculty who has paid attention to the resuscitating art. The Royal Humane Society of London has, for a series of years, offered premiums for machines and other inventions to save mariners and other persons from drowning in cases of shipwreck, or other accidents at sea. The committee of the Society have also recommended several inventions for enabling persons to swim from a wreck to the shore; particularly the cork or marine spencer, described under the article Cork, and the Life Preserver, invented by Mr. Daniel, of Wapping. This last is a sort of bag made of water-proof leather, which wraps round the body just under the arm-pits, and may be inflated like a bladder in the space of half a minute, by blowing with the breath through a silver tube, furnished with a stop-cock, which is to be turned when the machine is full of air.

DROWSE, *v. a.* & *v. n.* } Dut. *droosen*, from
DROWS'IHED, *n. s.* } Goth. *dur*, lightly, and
DROWS'ILY, *adv.* } doze. To make or be
DROWS'INESS, } heavy with sleep; to
DROWS'Y, *adj.* } slumber; to make heavy. Drowsihed is used by Spenser for drowsiness.

The day is spent, and cometh *drowsie* night,
When every creature shrouded is in sleepe.
Spenser. Faerie Queene.

The royal virgin shook off *drowsihed*;
And rising forth out of her baser boure,
Looked for her knight. *Faerie Queene.*

Up, up, my *drowsy* soul! where thy new ear
Shall in the angels' songs no discord hear.
Donne.

What a strange *drowsiness* possesses them!
Shakspeare.

They rather *drowsed* and hung their eyelids down,
Slept in his face, and rendered such aspect
As cloudy men use to their adversaries.
Id. Henry VI.

We satisfy our understanding with the first things, and, thereby satiated, slothfully and *drowsily* sit down.
Raleigh.

Men are *drowsy*, and desirous to sleep, before the fit of an ague, and do use to yawn and stretch.
Bacon's Natural History.

In deep of night, when *drowsiness*
Hath locked up mortal sense, then listen I
To the celestial syren's harmony. *Milton.*

All their shapes
Spangled with eyes, more numerous than those
Of Argus; and more wakeful than to *drowse*,
Charmed with Arcadian pipe. *Id. Paradise Lost.*

There gentle sleep
First found me, and with soft oppression seized
My *drowsed* senses uncontrolled. *Id.*

Drunken at last, and *drowsy* they depart
Each to his house. *Dryden.*

The air swarms thick with wandering deities,
Which *drowsingly* like humming-beetles rise. *Id.*

Drowsy am I, and yet can rarely sleep.
Sidney.

He that from his childhood has made rising betimes familiar to him, will not waste the best part of his life in *drowsiness* and lying a-bed. *Locke.*

He passes his whole life in a dozed condition, between sleeping and waking, with a kind of *drowsiness* and confusion upon his senses. *South.*

What succour can I hope the muse will send,
Whose *drowsiness* hath wronged the muse's friend?
Crashaw.

While thus she rested, on her arm reclined,
The hoary willows waving with the wind,
And feathered quires that warbled in the shade,
And purling streams that through the meadow strayed,
In *drowsy* murmurs lulled the gentle maid. *Addison.*

A sensation of *drowsiness*, oppression, and lassitude, are signs of a plentiful meal in young people.
Arbuthnot.

Those inadvertencies, a body would think, even our author, with all his *drowsy* reasoning, could never have been capable of. *Atterbury.*

The flowers, called out of their beds,
Start and raise up their *drowsy* heads.
Cleaveland.

Now while the *drowsy* world lies lost in sleep,
Let me associate with the serious night,
And contemplation, her sedate compeer.
Thomson.

Amidst the *drowsy* charms of dull delight,
Year chases year with unremitted flight,
Till want now following, fraudulent and slow,
Shall spring to seize thee like an ambushed foe.
Dr. Johnson's Poems.

A dull rotation, never at a stay,
Yesterday's face, twin image of to-day;
While conversation, an exhausted stock,
Grows *drowsy* as the clicking of a clock.
Cowper.

The *drowsy* dungeon-clock had numbered two,
And Wallace tower had sworn the fact was true:
The tide-swoln Frith, wi' sullen sounding roar,
Through the still night dashed hoarse along the shore.
Burns.

DRUB, *v. a.* & *n. s.* } Dan. *druber*, to kill;
DRUB'BING, *n. s.* } Swed. *drabba;* Island. *drybba*, to fight. To beat soundly; to give blows; also, the beating given, for which a drubbing is the common substantive of low conversation.

He that is valiant, and dares fight,
Though *drubbed*, can lose no honour by it.
Hudibras.

The blows and *drubs* I have received
Have bruised my body, and bereaved
My limbs of strength. *Id.*

The little thief had been soundly *drubbed* with a good honest cudgel. *L'Estrange.*

Though the bread be not mine, yet, if it had been less than weight, I should have been *drubbed*.
Locke.

By setting an unfortunate mark on their followers, they have exposed them to innumerable *drubs* and contusions. *Addison.*

In the rude state of society, prior to the existence of laws, if one man gave another ill language, the affronted person might return it by a box on the ear; and if repeated, by a good *drubbing*. *Franklin.*

DRUDGE, *v. n.* } Sax. dreogan; Dutch
DRUDG'ER *n. s.* } *draghen;* perhaps from
DRUDG'ERY, } DRAG, which see. To
DRUDG'INGLY, *adv.* } labor in heavy or servile
DRUG, *n. s.* } work: a drudger is he who thus labors, and drudgery the work done. Shakspeare has drugge for drudge in his first fol. edit. See the passage given below from Timon of Athens.

My old dame will be undone for one to do her husbandry and her *drudgery*. *Shakspeare.*

To conclude, this *drudge* of the devil, this diviner, laid claim to me. *Id. Comedy of Errors.*

He from his first swath proceeded
Through sweet degrees that this brief world affords,
To such as may the passive *drugs* of it
Freely command. *Id. Timon of Athens.*

Those whom the Egyptians honoured before as lords now they contemn as *drudges*.
Bp. Hall. Contemplations.

A high spirited man is above the world and its *drudgery*, and cannot pull down his thoughts to the pelting business of life. *Bp. Earle.*

He sits above and laughs the while,
At thee, ordained his *drudge*, to execute
Whate'er his wrath shall bid.
Milton's Paradise Lost.

And to cracked fiddle, and hoarse tabour,
In merriment, did *drudge* and labour. *Hudibras*

It is not poetry, that makes men poor;
For few do write, that were not so before;
And those that have writ best, had they been rich,
Had ne'er been seized with a poetic itch;
Had loved their ease too well, to take the pains
To undergo that *drudgery* of brains; *Id.*

Advantages obtained by industry, directed by philosophy, can never be expected from *drudging* ignorance. *Glanville.*

The hard master makes men serve him for nought, who rewards his *drudges* and slaves with nothing but shame, and sorrow, and misery. *Tillotson.*

The poor sleep little: we must learn to watch
Our labours late, and early every morning,
Midst winter frosts; then, clad and fed with sparing,
Rise to our toils, and *drudge* away the day. *Otway.*

To thee that *drudgery* of power I give;
Cares be thy lot: reign though, and let me live.
Dryden.

Paradise was a place of bliss, as well as immortality, without *drudgery*, and without sorrow. *Locke.*

Were there not instruments for *drudgery* as well as offices of *drudgery?* Were there not people to receive orders, as well as others to give and authorise them?
L'Estrange.

You do not know the heavy grievances,
The toils, the labours, weary *drudgeries*,
Which they impose. *Southern's Oroonoko.*

He does now all the meanest and triflingest things himself *drudgingly*, without making use of any inferior or subordinate minister. *Ray on the Creation.*

What is an age, in dull renown *drudged* o'er!
One little single hour of love is more. *Granville.*

Even *Drudgery* himself,
As at the car he sweats, or dusty hews
The palace stone, looks gay. *Thomson's Summer.*

It is now handled by every dirty wench, and condemned to do her *drudgery*.
Swift's Meditations on a Broomstick.

A man of wit is not incapable of business, but above it. A sprightly generous horse is able to carry a pack-saddle as well as an ass; but he is too good to be put to the *drudgery*. *Pope.*

I knew that the work in which I engaged is generally considered as *drudgery* for the blind, as the proper toil of artless industry.
Johnson. Plan of Dictionary.

But I am bankrupt now; and doomed henceforth
To *drudge*, in descant dry, on others' lays;
Bards, I acknowledge, of unequalled worth!
But what is commentators' happiest praise? *Cowper.*

The poor, inured to *drudgery* and distress,
Act without aim, think little, and feel less,
And no where, but in feigned Arcadian scenes,
Taste happiness, or know what pleasure means.
Id.

Think ye, that sic as you and I,
Wha *drudge* and drive through wet and dry,
Wi' never-ceasing toil. *Burns.*

DRU'DGING-BOX. See DREDGING-BOX.

DRUG, *n. s.* & *v. a.* } Fr. *drogue;* Span.
DRUG'GET, *n. s.* } and Ital. *droga;* pro-
DRUG'GIST, } bably from Sax. drug;
DRUG'STER, } Gr. τρυγη, dry; drugs

properly signifying dry medicines: and hence any thing dried up or worthless. Drugget is a light, common kind of stuff: druggist and drugster, a seller of drugs.

Mortal *drugs* I have; but Mantua's law
Is death to any he that utters them. *Shakspeare.*
The surfeited grooms
Do mock their charge with snores.—I've *drugged* their possets,
That death and nature do contend about them. *Id.*

The poore people, the good physician prescribes cheap but wholesome medicines; not removing the consumption out of their bodies into their purses, nor sending them to the East Indies for *drugs* which they can reach better out of their gardens. *Fuller.*

Oft they assayed,
Hunger and thirst constraining; *drugged* as oft
With hatefulest disrelish, writhed their jaws
With soot and cinders filled. *Milton's Paradise Lost.*
A fleet descried
Hangs in the clouds, by equinoctial winds
Close sailing from Bengal, or the isles
Of Ternate and Tidore, whence merchants bring
Their spicy *drugs.* *Id.*

In the names of *drugs* and plants, the mistake in a word may endanger life.
Baker's Reflections on Learning.

Common nitre we bought at the *druggist's.* *Boyle.*
Common oil of turpentine I bought at the *drugster's.*
Id.

Each noble vice
Shall bear a price
And virtue shall a *drug* become.
An empty name,
Was all her fame,
But now she shall be dumb.
Dryden's Albion.

In *druggets* drest, of thirteen pence a-yard,
See Philip's son amidst his Persian guard. *Swift.*

They set the clergy below their apothecaries, the physician of the soul below the *drugsters* of the body.
Atterbury.

Judicious physick's noble art to gain,
He *drugs* and plants explored, alas! in vain. *Smith.*
Bright Helen mixed a mirth-inspiring bowl,
Tempered with *drugs* of sov'reign use, to assuage
The boiling bosom of tumultuous rage.
Pope's Odyssey.

But O the' important budget! ushered in
With such heart-shaking music, who can say
What are its tidings? have our troops awaked?
Or do they still, as if with opium *drugged,*
Snore to the murmurs of the' Atlantic wave?
Cowper.

For Inez called some *druggists* and physicians,
And tried to prove her loving lord was mad,
But as he had some lucid intermissions,
She next decided he was only bad. *Byron.*

DRUGGET, a slight kind of woollen stuff, sometimes made all wool, sometimes half wool half thread; sometimes corded, but usually plain. Those that have the woof of wool, and the warp of thread, are called threaded druggets; and those wrought with the shuttle on a loom of four marches, as the serges of Moui, Beauvois, and other like stuffs corded, are called corded druggets. The plain are wrought on a loom of two marches, with the shuttle, in the same manner as cloths, camblets, and other like stuffs not corded.

DRUID, *n. s.* & *adj.* Gr. δρυς, Celt. *deru;* Welsh and Arm. *derw,* an oak. An ancient priest of Gaul and Britain. See below.

In yonder grave a *druid* lies
Where slowly steals the winding waves. *Collins.*
Sage beneath a spreading oak
Sat the *druid,* hoary chief;
Every burning word he spoke
Full of rage and full of grief. *Cowper.*
It stood embosomed in a happy valley,
Crowned by high woodlands, where the *druid* oak
Stood like Caractacus in act to rally
His host with broad arms 'gainst the thunderstroke. *Byron.*

DRUIDS, DRUIDES, or DRUIDÆ, the priests or ministers of religion among the ancient Gauls, Britons, and Germans. Picard (Celtoped. lib. ii. p. 58) believes the druids to have been thus called from Druis, or Dryius, their leader, the fourth or fifth king of the Gauls, and father of Saron or Naumes. Pliny, Salmatius, Vigenere, &c., derive the name from δρυς, an oak; on account of their inhabiting, or frequenting, and teaching in forests; or because they never sacrificed but under the oak. Menage derives the word from the old British drus, dæmon, or magician: Borel, from the Saxon dry, magician; or from the old British dru or derw, 'oak,' whence he takes the Greek word δρυς to be derived; which is the most probable supposition. Gorop. Becanus, lib. i. takes druis to be an old Celtic and German word, formed from trowis or truwis, 'a doctor of the truth and the faith;' which etymology Vossius also approves.

The druids were the first and most distinguished order among the Gauls and Britons; they were chosen out of the best families; and the honors of their birth, joined with those of their function, procured them the highest veneration among the people. They were versed in astrology, geometry, natural philosophy, politics, and geography; they were the interpreters of religion, and the judges of all affairs indifferently. Whoever refused obedience to them was declared impious and accursed. We know but little as to their peculiar doctrines; only that they believed the immortality of the soul; and the metempsychosis. Their chief settlement in Britain was in the isle of Anglesea, the ancient Mona, which was well stored with spacious groves of their favorite oak. They were divided into several classes. Strabo, however, only distinguishes three kinds, bardi, vates, and druids. The bardi were the poets; the vates, ϐατεις, were the priests and naturalists; and the druids, besides the study of nature, applied themselves to morality. Diogenes Laertius assures us, that the druids were the same among the ancient Britons with the philosophers among the Greeks; the magi among the Persians; the gymnosophists among the Indians; and the Chaldeans among the Assyrians. Their garments were remarkably long; and, when employed in religious cere-

monies, they wore a white surplice. They generally carried a wand in their hands; and wore a kind of ornament enchased in gold about their necks, called the druid's egg. See ANGUINUM OVUM. Their necks were also decorated with gold chains, and their hands and arms with bracelets: they wore their hair very short, and their beards remarkably long. The druids had one chief or arch-druid, in every nation, who acted as high-priest. He had absolute authority over the rest; and commanded, decreed, punished, &c., at pleasure. At his death he was succeeded by the most considerable among the survivors; and, if there were several pretenders, the matter was ended by an election, or else decided by arms. The druids presided at sacrifices, and other ceremonies; and had the direction of every thing relating to religion. The British and Gaulish youth were instructed by them. The children of the nobility, Mela tells us, they carried into caves, or the most desolate parts of forests, and kept them there, sometimes for twenty years, under their discipline. They were here instructed in the motion of the heavens, and the course of the stars; the magnitude of the heavens and the earth; the power and wisdom of the gods, the metempsychosis, immortality, &c. They preserved the memory and actions of great men in their verses, which they never allowed to be written down, but made their pupils get them by heart. In their common course of learning, they are said to have taught them 24,000 such verses. Thus their doctrines appeared more mysterious by being unknown to all but themselves; and, having no book to recur to, they were the more careful to fix them in their memory.

It has been disputed, whether the druids were themselves the inventors of their opinions and systems of religion and philosophy, or received them from others. Some have imagined, that the colony of Phocians, who left Greece and built Marseilles, in Gaul, about the fifty-seventh Olympiad, imported the first principles of learning and philosophy, and communicated them to the Gauls and other nations in the west of Europe. But though we may allow, that the druids of Gaul and Britain borrowed some hints of their philosophy from this Greek colony, we have reason to believe that the substance of it was their own. Others have suggested, that the druids derived their philosophy from Pythagoras, which seems to be confirmed by Ammianus Marcellinus, and indeed the philosophy of the druids bore a much greater resemblance to that of Pythagoras, than to that of any other sage of antiquity. But this resemblance may, perhaps, be best accounted for by supposing that Pythagoras adopted some of the opinions of the druids, as well as imparted to them some of his discoveries. And Aristotle says that the philosophy of the druids passed into Greece. It is therefore highly probable, and in fact directly asserted by several authors, that Pythagoras visited the druids of Gaul, and was initiated into their philosophy. From the concurring testimonies of several authors, it appears that natural philosophy was the favorite study of the druids of Gaul and Britain. According to Diodorus Siculus, Strabo, Cæsar, Mela, Ammianus Marcellinus, and others, they entered into many disquisitions, in their schools, concerning the form and magnitude of the universe in general, and of this earth in particular, and even concerning the most sublime and hidden secrets of nature. On these subjects they formed a variety of systems and hypotheses, which they delivered to their disciples in verse, that they might the more easily retain them in their memories, as they were not allowed to commit them to writing. Strabo has preserved one of the physiological opinions of the druids concerning the universe, viz. that it was never to be entirely destroyed or annihilated; but was to undergo a succession of great changes and revolutions, which were to be produced sometimes by the predominancy of water, and sometimes by that of fire. This opinion, he intimates, was not peculiar to them, but was entertained also by the philosophers of other nations; and Cicero speaks of it as a truth universally acknowledged and undeniable. But they did not express their sentiments on these and the like heads in a plain and natural, but in a dark, figurative, and enigmatical manner. We know not what their opinions were about the dimensions of the universe or of the earth, but we have several reasons to suppose that they believed both to be of a spherical form. This is visibly the shape and form of the sun, moon, and stars, the most conspicuous parts of the universe; and the circle was the favorite figure of the druids, as appears from their houses and places of worship.

It may be thought improbable that the druids had made any considerable progress in arithmetic, as this may seem to be impossible by the mere strength of memory, without the assistance of figures and of written rules. But it is very difficult to ascertain what may be done by memory alone, when it has been long exercised in this way. There is reason to think that they made use of the letters of the Greek alphabet for their calculations. Cæsar, speaking of the druids of Gaul, says, 'In almost all other public transactions, and private accounts or computations, they make use of the Greek letters.' This is further confirmed by what the same author says of the Helvetii, a people of the same origin, language, and manners with the Gauls and Britons. 'Tables were found in the camp of the Helvetii, written in Greek letters, containing an account of all the men capable of bearing arms, who had left their native country, and also separate accounts of the boys, old men, and women.'

Astronomy appears to have been one of the chief studies of the druids of Gaul and Britain. 'The druids,' says Cæsar, 'have many disquisitions concerning the heavenly bodies and their motions, in which they instruct their disciples.' Mela, speaking of the same philosophers, observes, 'That they profess to have great knowledge of the motions of the heavens and of the stars.' Some knowledge of this science, indeed, was absolutely necessary for fixing the regular returns of their religious solemnities, of which the druids had the sole direction. The druids computed their time by nights, and not by days, a custom which they had received from their

most remote ancestors by tradition, and in which they were confirmed by their measuring their time very much by the moon. They assembled upon stated days, either at the new or full moon; for they believed these to be the most auspicious times for transacting all affairs of importance. Their most solemn ceremony of cutting the misletoe from the oak was always performed on the sixth day of the moon. Nay, they even regulated their military operations very much by this luminary, and avoided, as much as possible, to engage in battle while the moon was on the wane. We are told both by Cæsar and Mela that the druids studied the stars as well as the sun and moon; and that they professed to know, and taught their disciples many things concerning the motions of these heavenly bodies.

There are still many monuments remaining in Britain and the adjacent isles which give reason to think that the ancient Britons could apply *the mechanical powers* so as to produce very astonishing effects. As these monuments appear to have been designed for religious purposes, we may be certain that they were erected under the direction of the druids. Many obelisks or pillars, of one rough unpolished stone each, are still to be seen in Britain and its isles. Some of these are both very thick and lofty, erected on the summits of barrows and of mountains; and some of them (as at Stonehenge) have ponderous blocks, raised aloft, and resting on the tops of the upright pillars. We can hardly suppose that it was possible to cut these prodigious masses of stone (some of them above forty tons in weight) without wedges, or to raise them out of the quarry without levers. But it certainly required still greater knowledge of the mechanical powers, and of the method of applying them, to transport those huge stones from the quarry to the places of their destination, to erect the perpendicular pillars, and to elevate the imposts to the tops of these pillars. That the British druids were acquainted with the principles and use of the balance, we have good reason to believe, from some druidical monuments still remaining, called Lagan stones, or rocking-stones. Each of them consists of one prodigious block or stone, resting upon an upright stone or rock, and so equally balanced, that a very small force, sometimes even a child, can move it up and down, though hardly any force is sufficient to remove it from its station. Some of these stones may have fallen into this position by accident, but others of them evidently appear to have been placed in it by art. That the ancient Britons understood the construction and use of wheels, the great number of their war-chariots and other wheel-carriages is a sufficient proof; and that they knew how to combine them together, and with the other mechanical powers, so as to form machines capable of raising and transporting very heavy weights, we have good reason to believe.

In Germany and in the northern nations of Europe, the healing art was chiefly committed to the old women of every state; but in Gaul and Britain it was entrusted to the druids, who were the physicians as well as the priests of these countries. Pliny says expressly, 'That Tiberius Cæsar destroyed the druids of the Gauls, who were the poets and physicians of that nation. The people of Gaul and Britain were probably induced to devolve the care of their health on the druids, and to apply to these priests for the cure of their diseases, not only by the high esteem they had of their wisdom and learning, but also by the opinion which they entertained, that a very intimate connexion subsisted between the arts of healing and the rites of religion; and that the former were most effectual when accompanied by the latter. It was indeed a prevailing opinion of all the nations of antiquity, that all internal diseases proceeded from the anger of the gods; and that the only way to obtain relief was to appease them by sacrifices.—That this was the practice of the Gauls and Britons, who, in some cases sacrificed one man as the most effectual means of curing another, is attested by Cæsar. This gave rise also to that great number of magical rites and incantations with which the medical practice of the druids, and of most ancient physicians was attended. The druids entertained a very high opinion of the medical virtues of the misletoe, and esteemed it a remedy for all diseases. They believed it to be a specific against barrenness; a sovereign antidote against the effects of poisons; excellent for softening and discussing hard tumors; good for drying up scrofulous sores; for curing ulcers and wounds; and (provided it was not suffered to touch the earth after it was cut) very efficacious in the epilepsy. The selago, a kind of hedge hyssop, resembling savin, was another plant, much admired by the druids for its supposed medicinal virtues, particularly in diseases of the eyes. But its efficacy, according to them, depended much upon its being gathered under certain magical directions. They entertained a high opinion also of the herb samolus or marsh-wort for its sanative qualities; and gave many directions for gathering it. The person who was to perform that office was to do it fasting, and with his left hand; he was on no account to look behind him, nor to turn his face from the herbs he was gathering. It would be tedious to relate the extravagant notions they entertained of the many virtues of the vervain, and to recount the ridiculous mummeries which they practised in gathering and preparing it, both for the purposes of divination and physic. These may be seen in Pliny's Hist. Nat. l. 25. c. 9, from whom we have these anecdotes; but who, like other Greek and Roman writers, seems designedly to represent the philosophers of Gaul and Britain in an unfavorable light. We learn from Cæsar that the druids were the judges and arbiters of all differences and disputes, both public and private: they took cognizance of murders, inheritances, boundaries, and limits; and decreed rewards and punishments. Such as disobeyed their decisions they excommunicated, which was their principal punishment; the criminal being hereby excluded from all public assemblies, and avoided by all the world; so that nobody durst speak to him for fear of being polluted. Strabo observes, they had sometimes authority enough to stop armies upon the point of engaging, and accommodate their differences.

If the British druids made no contemptible proficiency in several parts of real and useful learning, it cannot be denied that they were also great pretenders to superior knowledge in certain vain fallacious sciences, by which they excited the admiration, and took advantage of the ignorance and credulity of mankind. These were magic and divination; by which they pretended to work miracles, and exhibit astonishing appearances in nature; to penetrate into the counsels of heaven, to foretel future events, and to discover the success or miscarriage of public or private undertakings. Their countrymen not only believed that the druids were possessed of these powers, but they were celebrated on this account by the philosophers of Greece and Rome. 'In Britain' says Pliny, 'the magic arts are cultivated with such astonishing success, that the Britons seem to be capable of instructing even the Persians themselves in these arts. They pretend to discover the designs and purposes of the gods. The Eubates or Vates, in particular, investigate and display the most sublime secrets of nature; and by auspices and sacrifices they foretel future events.' They were so famous for the supposed veracity of their predictions, that they were not only consulted on all important occasions by their own princes and great men, but even sometimes by the Roman emperors. Stonehenge, and several other works of the druids, were believed to have been executed by the art of magic, for many ages after the destruction of their whole order. The natural and acquired sagacity of the druids, with their long experience in public affairs, enabled them to form very probable conjectures about the event of enterprises. These conjectures they pronounced as oracles when they were consulted; and they pretended to derive them from inspecting the entrails of victims, observing the flight of certain birds, and other mummeries. By such arts they obtained and preserved the reputation of prophetic foresight among an ignorant and credulous people.

They worshipped the Supreme Being under the name of Esus, or Hesus, and the symbol of the oak; and had no other temple than a wood or a grove, where all their religious rites were performed. Nor was any person admitted to enter that sacred recess unless he carried with him a chain, in token of his absolute dependence on the Deity. Indeed, their whole religion originally consisted in acknowledging that the Supreme Being, who made his abode in these sacred groves, governed the universe; and that every creature ought to obey his laws, and pay him divine homage. They considered the oak as the emblem, or rather the peculiar residence, of the Almighty; and accordingly chaplets of it were worn both by the druids and people in their religious ceremonies; the altars were strewed with its leaves, and encircled with its branches. The fruit of it, especially the misletoe, was thought to contain a divine virtue, and to be the peculiar gift of heaven. It was therefore sought for on the sixth day of the moon with the greatest earnestness and anxiety; and when found, was hailed with such raptures of joy, as it almost exceeds imagination to conceive. As soon as the druids were informed of this fortunate discovery, they prepared every thing ready for the sacrifice under the oak, to which they fastened two white bulls by the horns; then the arch-druid, attended by a prodigious number of people, ascended the tree, dressed in white; and with a consecrated golden knife, or pruning-hook, cropped the misletoe, which he received in his sagum or robe, amidst the rapturous exclamations of the people. Having secured this sacred plant he descended the tree; the bulls were sacrificed, and the Deity invoked to bless his own gift, and render it efficacious in those distempers in which it should be administered. The consecrated groves, in which they performed their religious rites, were fenced round with stones, to prevent any person's entering between the trees, except through the passages left open for that purpose, and which were guarded by some inferior druids, to prevent any stranger from intruding into their mysteries. These groves were of different forms: some quite circular, others oblong, and more or less capacious, as the votaries in the districts to which they belonged were more or less numerous. The area in the centre of the grove was encompassed with several rows of large oaks set very close together. Within this large circle were several smaller ones, surrounded with large stones; and near the centre of these smaller circles were stones of a prodigious size and convenient height, on which the victims were slain and offered. Each of these being a kind of altar, was surrounded with another row of stones, the use of which cannot now be known, unless they were intended as cinctures to keep the people at a convenient distance from the officiating priest. Suetonius, in his life of Claudius, assures us the druids sacrificed men; and Mercury is said to be the god to whom they offered these victims. Diodorus Siculus (lib. vi.) observes it was only upon extraordinary occasions they made such offerings; as to consult what measures to take, to learn what should befal them, &c., by the fall of the victim, the tearing of his members, and the manner of his blood gushing out. Augustus condemned the custom, and Tiberius and Claudius punished and abolished it.

DRUIDÆ, or DROIUM, in ancient geography, the principal place of the Druids in Gaul; where they met annually in a consecrated grove, according to Cæsar. It was also called Durocases; and is now named Dreux.

DRUM, *n. s.* & *v. n.*, DRUM'FISH, *n. s.*, DRUM'MAJOR, DRUM'MAKER, DRUM'MER, DRUM'STICK, } Dan. *tromme*; Dut. *trommel*; Germ. *trombe*; perhaps from Arab. *drub* a *dub*, to beat: but in Ang.-Sax. dryminga is a soft murmuring sound; and Skinner thinks the word is formed from the sound. An instrument of military music; the tympanum of the ear; and, from the hum made, a concourse of persons. A drum-major is a chief drummer.

> Let's march without the noise of threatening *drums*.
> *Shakspeare.*
>
> *Drummer*, strike up, and let us march away. *Id.*
>
> In *drums*, the closeness round about, that preserveth the sound from dispersing, maketh the noise

come forth at the drum-hole far more loud and strong than if you should strike upon the like skin extended in the open air. *Bacon.*

Tears trickling down their breasts bedew the ground,
And *drums* and trumpets mix their mournful sound.
Dryden.

Now, heart,
Set ope thy sluices, send the vigorous blood
Through every active limb for my relief;
Then take thy rest within the quiet cell,
For thou shalt *drum* no more. *Id.*

The *drummaker* uses it, and the cabinetmaker. *Mortimer.*

The under-jaw of the *drumfish* from Virginia. *Woodward.*

Such company may chance to spoil the swearing
And the *drummajor's* oaths, of bulk unruly,
May dwindle to a feeble.— *Clezeland.*

Now no more the *drum*
Provokes to arms, or trumpet's clangor shrill
Affrights the wives, and chills the virgin's blood.
Philips.

Here rows of *drummers* stand in martial file,
And with their vellum-thunder shake the pile.
Gay.

I lastly was with Curtis, among the floating batt'ries,
And there I left for witnesses an arm and limb:
Yet let my country need me, with Elliot to head me,
I'd clatter on my stumps at the sound of the *drum*.
Burns.

He hates the field in which no fife or *drum*
Attends him; drives his cattle to a march;
And sighs for the smart comrades he has left.
Cowper.

There is no variety of notes referable to the gamut in the beating of a *drum*, yet, if it be performed in musical time, it is agreeable to our ears; and therefore this pleasurable sensation must be owing to the repetition of the divisions of the sounds at certain intervals of time, or musical bars. *Darwin.*

Often in the hottest morn in summer, you may see her on a little squat pony, with her hair plaited up behind like a *drummer's*, and puffing round the ring on a full trot. *Sheridan.*

And swiftly forming in the ranks of war;
And the deep thunder peel on peel afar;
And near, the beat of the alarming *drum*
Roused up the soldier e'er the morning star.
Byron.

DRUM, is a martial musical instrument, in the form of a cylinder, hollow within and covered at the two ends with vellum, which may be stretched or slackened by small cords and sliding leathers attached. This instrument is said to have been invented by Bacchus, who, as Polyenes reports, gave his signals of battle with cymbals and drums; and the Saracens, who invaded Palestine, first introduced it into Europe. The drums are sometimes made of brass. Those belonging to the Blues are silver.

Kettle-drums are two sorts of large basins of copper or brass, rounded at the bottom and covered with vellum or goat-skin, which is kept fast by a circle of iron, and several holes, fastened to the body of the drum, and a like number of screws to stretch it at pleasure. They are used among the horse.

We give the following account of the different beats of the drum from James's Military Dictionary.

The *General*, to give notice to the troops that they are to march.

The *Assembly*, or *Troop*, to order the troops to repair to the place of rendezvous, or to their colors.

The *March*, to command them to move, always with the left foot first.

Tat-too, or *Tap-too*, to order all to retire to their quarters.

To Arms! for soldiers who are dispersed, to repair to them.

The *Réveillé* always beats at break of day, and is to warn the soldiers to rise, and the sentinels to forbear challenging, and to give leave to come out of quarters.

The *Retreat*, a signal to draw off from the enemy. It likewise means a beat in both camp and garrison a little before sun-set, at which time the gates are shut, and the soldiers repair to their barracks, &c.

The *Alarm*, to give notice of sudden danger, that all may be in readiness for immediate duty.

The *Parley*, or *Chamade*, a signal to demand some conference with the enemy.

Long March, a beat which was formerly used in England; on the sound of which, the men clubbed their firelocks, and claimed and used the liberty of talking all kind of ribaldry.

The *Church Call*, called, also, *Beating the Bank;* a beat to summon the soldiers of a regiment, or garrison, to church.

The *Pioneer's Call*, known by the appellation of round heads and cuckolds! come dig; this is beaten in camp to summon the pioneers to work.

The *Serjeants' Call*, a beat for calling the serjeants together in the orderly-room, or in camp, to the head of the colors.

The *Drummers' Call*, a beat to assemble the drummers at the head of the colors, or in quarters at the place where it is beaten.

The *Preparative*, a signal to make ready for firing.

The *Warning Drum*, a beat to give officers and soldiers time to assemble for their meals in camp or quarters.

The *Roast-beef of Old England*, a beat to call officers to dinner.

DRUMMER, or DRUM, he that beats the drum; of whom each company of foot has one, and sometimes two. Every regiment has a drum-major, who has the command over the other drums. They are distinguished from the soldiers by clothes of a different fashion: their post, when a battalion is drawn up, is on the flanks, and on march it is betwixt the divisions.

DRU'MBLE, *v. n.* A diminutive of drum; probably from the noise of a sluggish stream. Hence drumbly, or drumly, is stagnant: see below. To drone; to be sluggish.

Take up these cloaths here quickly: where 's the cowlstaff? Look, how you *drumble!* carry them to the landress in Datchet Mead.
Shakspeare. Merry Wives of Windsor.

DRUMLY, *adj.* From drumble. Stagnant thick; muddy.

Then bouses *drumly* German water,
To mak himsel look fair and fatter,

An' clear the consequential sorrows,
Love-gifts of Carnival signoras. *Burns.*

DRUMMOND (William), the son of Sir John Drummond, of Hawthornden, knight of the black rod to king James I., was born in Scotland in 1585. He was educated at Edinburgh, where he took the degree of A.M. In 1606 he was sent by his father to study civil law at Bourges in France; but, having a dislike for the law, he returned to his agreeable seat at Hawthornden, where he applied himself with great assiduity to classical learning and poetry. Here he wrote his Cypress Grove, and, about the same time, Flowers of Zion, in verse. But on the death of a lady, to whom he was about to be married, he went to Paris and Rome. He travelled through France, Germany, and Italy, where he visited the universities; and, after an absence of eight years, returned to his native country. On the appearance of a civil war, he retired again; and is now supposed to have written his History of the Five James's, kings of Scotland, which was not published till after his death. He was steadily attached to Charles I.; and, in a piece called Irene, he harangues the king, nobility, and clergy, about their mutual mistakes, fears, and jealousies; and lays before them the consequences of a civil war. His attachment to the king was so strong, that when he heard of his being executed, he is said to have been overwhelmed with grief, and to have lifted up his head no more. He died in 1649, leaving behind him several children: the eldest of whom, William, was knighted by Charles II. He was the intimate friend of Michael Drayton and Ben Jonson; the latter of whom, at the age of forty-five, travelled from London on foot to visit him at Hawthornden. An edition of his works, with his life prefixed, was printed in folio at Edinburgh in 1711. Among all the writers of the seventeenth century, who flourished after the death of Shakspeare, there is not one whom a general reader of the English poetry of that age will regard with so much and so deserved attention, as William Drummond. His thoughts are generally bold and highly poetical: he closely follows nature, and his verses are delicately harmonious. On the death of Henry prince of Wales, in 1612, Drummond wrote an elegy entitled Tears on the death of Moeliades; a name which that prince had used in all his challenges of martial sport, as the anagram of Miles à Deo.

DRUNK'ARD,
DRUNK'EN,
DRUNK'ENLY,
DRUNKEN'NESS. } See DRINK.

DRUPA, or DRUPPA. See BOTANY. The cherry, plum, peach, apricot, and all other stone fruit are of this kind. The term, which is of great antiquity, is synonymous to Tournefort's fructus mollis ossiculo, 'soft fruit with a stone;' and to the prunus of other botanists. The stone or nut, which in this sort of fruit is surrounded by the soft pulpy flesh, is a kind of ligneous or woody cup, which contains a single kernel or seed. This definition, however, will not apply to every seed-vessel denominated drupa in the Genera Plantarum. The almond is a drupa, so is the seed vessel of the elm trees and the genus rumphia, though far from being pulpy or succulent; the first and third are of a substance like leather, the second like parchment. The same may be said of the walnut, the pistachia nut, guetterda, quisqualis, jack-in-a-box, and some others. The seeds of the elm schrebera, stagellaria, and the mango tree, are not contained in a stone. The seed-vessel of burr-reed is dry, shaped like a top, and contains two angular stones.

DRURY (Robert), an English mariner, and a humble but respectable author, was born in Leicestershire. In 1702, while a boy, he was shipwrecked in the Degrave, East Indiaman, on the south side of the island of Madagascar, and lived in captivity there for fifteen years. On his return he published, in 1743, an account of the island, and of his own adventures, in a plain unadorned manner, and being corroborated as far as it went by the journal of Mr. Benbow, the son of the admiral, who was wrecked at the same time, his book has always been considered authentic. It was republished in 1808. Drury became porter at the India-house, and inherited some little property, but when he died is not known.

DRUSES, DRUZES, or more properly Duruz, signifying riches, or sensual comforts, the great rewards of their faith, a remarkable nation in Palestine, inhabiting the environs of Mount Lebanon, of whose origin and history we have considerable details from the pen of M. Volney, to which we subjoin the more modern observations of Messrs. Niebuhr, Burckhardt, &c.

Twenty-three years after the death of Mahomet, the disputes between Ali his son-in-law and Moaduia governor of Syria, occasioned the first schism in the empire of the Arabs, and the two sects subsist to this day: but, in reality, this difference related only to power; and the Mahommedans, however divided in opinion respecting the rightful successor of the prophet, were agreed with respect to their dogmas. It was not until the following century, that the perusal of Greek books introduced among the Arabs a spirit of discussion and controversy, to which till then they were utter strangers. The consequence was, as might be expected, by reasoning on matters not susceptible of demonstration, and guided by the abstract principles of an unintelligible logic, they divided into a multitude of sects and opinions. At this period, too, the civil power lost its authority; and that kind of religion, which derives from it alone the means of preserving its unity, shared the same fate. The nations which had received the religion of Mahomet, mixed with it their former absurd notions; and the errors which had anciently prevailed over Asia again made their appearance, though altered in their forms. The Metempsychosis, the doctrine of a good and evil principle, and the renovation after 6000 years, as it had been taught by Zoroaster, were again revived. In this political and religious confusion, every enthusiast became an apostle, and every apostle the head of a sect. No less than sixty of these were reckoned, remarkable for the numbers of their followers, all differing in some points of faith, and all disavowing heresy and error. Such was the state of these countries, when, at

ıe commencement of the eleventh century, 'gypt became the theatre of one of the most xtravagant scenes of enthusiasm and absurdity ver recorded in history. The following account extracted from the eastern writers. In the year f the Hejira 386 (A. D. 996), the third caliph f the race of the Fatemites, called Hakem B' ımr-Ellah, succeeded to the throne of Egypt at ıe age of eleven years. He was one of the most ıad and capricious princes of whom history has reserved the name, not excepting Caligula imself. He caused the first caliphs, the comanions of Mahomet, to be cursed in the mosques, nd afterwards revoked the anathema: he comelled the Jews and Christians to abjure their eligion, and then permitted them to resume it. le prohibited the making slippers for women, to revent them from coming out of their houses. le burnt one half of the city of Cairo for his iversion, while his soldiers pillaged the other. le prohibited the pilgrimage to Mecca, fasting, nd the five prayers; and at length carried his ıadness so far as to desire to pass for God himelf! He ordered a register of those who acknowdged him to be so, and the number amounted) 16,000! This impious pretension was suported by a prophet, named Mohammed Ben smael, who came from Persia into Egypt, and ıught that it was not necessary to fast or pray,) practise circumcision, to make the pilgrimage) Mecca, or observe festivals; that the prohibion of pork and wine was absurd; and that ıarriage between brothers and sisters, fathers nd children, was lawful. To ingratiate himself ith Hakem, he maintained that this caliph was od himself incarnate; and instead of his name lakem B' Amr-Ellah, which signifies governing y the order of God, he called him Hakem B' ımr-Eh, governing by his own order. Unluckily r the prophet, his new god had not the power) protect him from the fury of his enemies, for ıey slew him in a tumult almost in the arms of ıe caliph, who was himself massacred soon after ı mount Mokattam, where he, as he said, had ıld conversation with angels. The death of ıese two chiefs did not stop the progress of their pinions; a disciple of Mohammed Ben Ismael, ımed Hamzah Ben Ahmud, propagated them ith indefatigable zeal in Egypt, in Palestine, ıd along the coast of Syria, as far as Sidon and erytus. His proselytes being persecuted by the ct in power, they took refuge in the mountains Lebanon, where they were better able to fend themselves; at least it is certain, that, ortly after this era, we find them established ere, and forming an independent society. The fference of their opinions disposes them to be ıemies; but the urgent interest of their common fety forces them to allow mutual toleration, and ey have always appeared united, and have intly opposed, at different times, the Crusaders, e sultans of Aleppo, the Mamelukes, and the ttomans. The conquest of Syria by the latter, ade no change in their situation. Selim I. on s return from Egypt, meditating no less than e conquest of Europe, disdained to waste his ne before the rocks of Lebanon. Soliman II. his ccessor, incessantly engaged in important wars, ther with the knights of Rhodes, the Persians, the kingdom of Yemen, the Hungarians, the Germans, or the emperor Charles V. had no time to think of the Druses. Emboldened by this inattention, and not content with their independence, they frequently descended from their mountains to pillage the Turks. The pachas in vain attempted to repel their inroads; their troops were invariably routed or repulsed. And it was not till 1588, that Amurath III. wearied with the complaints made to him, resolved, at all events, to reduce these rebels, and had the good fortune to succeed. His general, Ibrahim Pacha, marched from Cairo, and attacked the Druses and Maronites, with so much address and vigor, as to force them into their strong holds in the mountains. Dissension took place among their chiefs, of which he availed himself to exact a contribution of upwards of 1,000,000 of piastres, and to impose a tribute which has contiuued to the present time.

This expedition was the epocha of a considerable change in the constitution of the Druses. Till then they lived in a sort of anarchy, under the command of different sheiks or lords. The nation was likewise divided into two factions, such as is to be found in all the Arab tribes, and which are distinguished into the Kaisi and Yamani parties. To simplify the administration, Ibrahim permitted them only one chief, who should be responsible for the tribute, and execute the office of civil magistrate; and this governor, from the nature of his situation, acquiring great authority, became almost the king of the republic; but, as he was always chosen from among the Druses, a consequence followed, which the Turks had not foreseen, and which was nearly fatal to their power. The chief thus chosen, having at his disposal the whole strength of this people, was able to give it unanimity and energy, and naturally turned it against the Turks; who, by becoming their masters, had not ceased to be their enemies. They took care, however, that their attacks should be indirect, so as to save appearances, and only engaged in secret hostilities. About this time, viz. in the beginning of the seventeenth century, the power of the Druses attained its greatest height; which it owed to the talents and ambition of the celebrated Faker-el-din, commonly called Fakardin. No sooner was this prince advanced to be the chief of that people, than he turned his whole attention to humble the Ottoman power, and aggrandise himself. In this enterprise he displayed an address seldom seen among the Turks. He first gained the confidence of the Porte, by every demonstration of loyalty and fidelity; and as the Arabs at that time infested the plain of Balbec, and the country around Acre, he made war upon them, freed the inhabitants from their depredations, and thus rendered them desirous of living under his government. The city of Bairout was situated advantageously for his designs, as it opened a communication with foreign countries, particularly with the Venetians. Faker-el-din availed himself of the misconduct of the aga, expelled him, seized on the city, and even had the art to make a merit of this act of hostility with the divan, by paying a more considerable tribute. He proceeded in the

same manner at Saide, Balbec, and Sour; and at length, about A. D. 1613, saw himself master of all the country as far as Adjaloun and Safad. The pachas of Tripoli and Damascus sometimes opposed him by open force, though ineffectually, and sometimes endeavoured to ruin him at the Porte by secret insinuations; but the emir, who maintained there his spies and defenders, defeated every attempt. At length, however, the divan began to be alarmed at the progress of the Druses, and made preparations for an expedition capable of crushing them. Whether from policy or fear, Faker-el-din did not think proper to wait this storm. He had formed connexions in Italy, on which he built great hopes, and determined to go in person to solicit the succours they had promised him; persuaded that his presence would increase the zeal of his friends, while his absence might appease the resentment of his enemies. He therefore embarked at Bairout; and after resigning the administration to his son Ali, repaired to the court of the Medici at Florence. The arrival of an oriental prince in Italy did not fail to attract the public attention. Enquiry was made into his nation, and the origin of the Druses became a popular topic of research. Their history and religion were found to be so little known, as to leave it a matter of doubt, whether they should be classed with the Mahommedans or Christians. The crusades were called to mind; and it was suggested, that a people who had taken refuge in the mountains, and were enemies to the natives, could be no other than the offspring of the crusaders. This conceit was too favorable to Faker-el-din for him to endeavour to disprove it; he was artful enough, on the contrary, to pretend he was related to the house of Lorraine; and the missionaries and merchants, who promised themselves a new opening for conversion and commerce, encouraged his pretensions. When an opinion is in vogue, every one discovers new proofs of its certainty. The learned in etymology, struck with the resemblance of the names, insisted that Druses and Dreux must be the same word; and on this foundation formed the system of a pretended colony of French crusaders, who, under the conduct of a count de Dreux, had formed a settlement in Lebanon. This hypothesis, however, was completely overthrown by the remark, that the name of the Druses is to be found in the itinerary of Benjamin Tudela, who travelled before the time of the crusades. Indeed the futility of it ought to have been sufficiently apparent at first, from the single consideration, that had they been descended from any nation of the Franks, they must have retained at least the traces of some European language; for a people, retired into a separate district, and living distinct from the natives of the country, do not lose their language. That of the Druses, however, is almost a pure Arabic. After a stay of nine years in Italy, Faker-el-din returned to resume the government of his country. During his absence, his son Ali had repulsed the Turks, appeased discontents, and maintained affairs in good order. Nothing remained for the emir, but to employ the knowledge he had acquired, in perfecting the internal administration of government, and promoting the welfare of the nation; but, instead of the useful arts, he abandoned himself to the frivolous and the expensive, for which he had imbibed a passion in Italy. He built numerous villas; constructed baths, and planted gardens; he even presumed, notwithstanding they are prohibited by the Koran, and without respect to the prejudices of his country, to employ the ornaments of painting and sculpture. The consequences of this were, the Druses, who paid the same tribute as in time of war, became dissatisfied. The Yamani faction was roused into revolt, the people murmured at the expenses of the prince, and the luxury he displayed renewed the jealousy of the pachas. They attempted to levy greater tribute: hostilities again commenced, and Faker-el-din repulsed the forces of the pachas; who took occasion, from this resistance, to render him suspected by the sultan himself. Amurath III. incensed that one of his subjects should dare to enter into a competition with him, resolved on his destruction; and the pacha of Damascus received orders to march, with all his forces, against Bairout, the usual residence of Faker-el-din; while forty galleys invested it by sea, and cut off all communication. The emir, who depended on his good fortune and succours from Italy, determined at first to brave the storm. His son Ali, who commanded at Safad, bravely opposed the progress of the Turkish army, notwithstanding the great disparity of his forces; but after two engagements, in which he had the advantage, being slain in a third attack, the face of affairs was greatly changed, and every thing went to ruin. Faker-el-din terrified at the loss of his troops, afflicted at the death of his son, and enfeebled by age and luxury, lost his courage. He sent his second son to solicit a peace of the Turkish admiral, whom he attempted to seduce by presents; but the admiral, detaining both the presents and envoy, declared he would have the prince himself. Faker-el-din, intimidated, took flight, and was pursued by the Turks, now masters of the country. He took refuge on the steep eminence of Niha, where they besieged him ineffectually for a whole year, when they left him at liberty: but shortly after, the companions of his adversity, wearied with their sufferings, betrayed and delivered him up to the Turks. He was carried to Constantinople, where Amurath, pleased to behold at his feet a prince so celebrated, at first treated him with that benevolence which arises from the pride of superiority; but afterwards yielded to the instigations of his courtiers, and, in one of his violent fits of passion, ordered him to be strangled.

After the death of Faker-el-din, his posterity still continued in possession of the government, as vassals of the Turks. But this family failing in the male line at the beginning of the eighteenth century, the authority devolved, by the election of the sheiks, on the house of Shelah or Shihab, in which it still continues. The only emir of that house who merits notice is Melhem, who reigned from 1740 to 1759, retrieved the losses of the Druses, and restored them to that consequence which they had lost by the defeat of Faker-el-din. Towards the end of his life,

about 1754, Melhem, wearied with the cares of government, abdicated his authority, to live in religious retirement, after the manner of the Okkals; but the troubles that succeeded occasioned him once more to resume the reins of government, which he held till 1759, when he died, universally regretted. He left three sons, minors: the eldest of whom ought to have succeeded him: but, being only eleven years of age, the authority devolved on his uncle Mansour, agreeably to a law very general in Asia, that the people shall be governed by a sovereign who has arrived at the years of maturity. The young prince was but little fitted to maintain his pretensions; but a Maronite, named Sad-el-Kouri, to whom Melhem had entrusted his education, took this upon himself. Aspiring to see his pupil a powerful prince, that he might himself become a powerful vizier, he made every exertion to advance his fortune. He first retired with him to Djebail, in the Kesraouan, where the emir Yousef possessed large dominions, and there undertook to conciliate the Maronites, by embracing every opportunity to serve both individuals and the nation. The great revenues of his pupil, and the moderation of his expenditure, amply furnished him with the means. The farm of the Kesraouan was divided between several sheiks, with whom the Porte was not very well satisfied. Sad treated for the whole with the pacha of Tripoli, and got himself appointed sole receiver. The Motoualis of the valley of Balbec had for some years before made several encroachments on Lebanon, and the Maronites began to be alarmed at the near approach of these intolerant Mahommedans. Sad purchased of the pacha of Damascus a permission to make war upon them; and in 1763 drove them out of the country. The Druses were at that time divided into two factions; Sad united his interest with those who opposed Mansour, and secretly prepared the plot which was to raise the nephew, by the ruin of the uncle. At this period the Arab Daher, who had made himself master of Galilee, and fixed his residence at Acre, disquieted the Porte by his progress and pretensions: to oppose him, the divan had just united the pachalics of Damascus, Saide, and Tripoli, in the hands of Osman and his children; and it was evident that an open war was not very remote. Mansour, who dreaded the Turks too much to resist them, made use of the policy usual on such occasions, pretending a zeal for their service, while he secretly favored the enemy. This was a sufficient motive for Sad to pursue measures directly opposite. He supported the Turks against the faction of Mansour, and manœuvred with so much address, as to depose that emir in 1770, and place Yousef in his government. In 1771 Ali Bey declared war, and attacked Damascus. Yousef, called on by the Turks, took part in the quarrel, but without being able to draw the Druses from their mountains, to enter into the army of the Ottomans. Besides their natural repugnance, at all times, to make war out of their country, they were on this occasion too much divided at home to quit their habitations, and they had reason to congratulate themselves on the event. The battle of Damascus ensued; and the Turks were completely routed. The pacha of Saide escaping from this defeat, and not thinking himself safe in that town, sought an asylum even in the house of Yousef. The moment was unfavorable: but the face of affairs soon changed by the flight of Mohammed Bey. The emir, concluding that Ali Bey was dead, and not imagining that Daher was powerful enough singly to maintain the quarrel, declared openly against him. Saide was threatened with a siege, and he detached 1500 men of his faction to its defence; while himself in person, prevailing on the Druses and Maronites to follow him, made an incursion with 25,000 peasants into the valley of Bekaa; and in the absence of the Motoualis, who had joined the army of Daher, laid the whole country waste with fire and sword from Balbec to Tyre. While the Druses, proud of this exploit, were marching in disorder towards the latter city, 500 Motoualis, informed of what had happened, flew from Acre inflamed with rage and despair, and fell with such impetuosity on their army as to give them a complete overthrow. Such was the surprise and confusion of the Druses, that, imagining themselves attacked by Daher himself and betrayed by their companions, they turned their swords on each other as they fled. The steep declivities of Djezin, and the pine woods which were in the route of the fugitives, were strewed with dead, few of whom perished by the hands of the Motoualis. The emir Yousef, ashamed of this defeat, escaped to Dair el Kamer, and shortly after attempted to take revenge; but, being again defeated in the plain between Saide and Sour (Tyre), he was constrained to resign to his uncle Mansour the ring, which, among the Druses, is the symbol of command. In 1773 he was restored by a new revolution; but he could not support his power but at the expense of a civil war. In order, therefore, to prevent Bairout from falling into the hands of the adverse faction, he requested the assistance of the Turks, and demanded of the pacha of Damascus a man of sufficient abilities to defend that city. The choice fell on Ahmad, an adventurer, who, from his subsequent fortune, merits particular notice. This man was a native of Bosnia, and spoke the Sclavonian as his mother tongue. It is said, that flying from his country at the age of sixteen, to escape the consequences of an attempt to violate his sister in law, he repaired to Constantinople, where, destitute of the means of procuring a subsistence he sold himself to the slave-merchants to be conveyed to Egypt; and, on his arrival at Cairo, was purchased by Ali Bey, who placed him among his Mamelukes. Ahmad was not long in distinguishing himself by his courage and address.—His patron employed him on several occasions in dangerous coups de main, such as the assassination of such beys and cachefs as he suspected; of which commissions he acquitted himself so well, as to acquire the name of Djezzar. With this claim to his friendship, he enjoyed the favor of Ali, until he was disturbed by an accident. The jealous Bey, having proscribed one of his benefactors called Saleh Bey, commanded Ahmad Djezzar to cut off his head.

Either from humanity or some secret friendship for the devoted victim, Djezzar hesitated, and even remonstrated against the order. But learning the next day that Mohammed Bey had executed the commission, and that Ali had spoken of him not very favorably, he thought himself a lost man, and, to avoid the fate of Saleh, escaped unobserved, and reached Constantinople. He there solicited employments suited to his former rank; but meeting, as is usual in capitals, with a great number of rivals, he pursued another plan, and went to seek his fortune in Syria as a private soldier. Chance conducted him among the Druses, where, being hospitably entertained in the house of the kiaya of the emir Yousef, he repaired to Damascus, and obtained the title of Aga, with the command of five pair of colors, that is to say of fifty men. He was thus situated when fortune destined him to the government of Bairout. Djezzar was no sooner establisked there, than he took possession of it for the Turks. Yousef was confounded at this proceeding. He demanded justice at Damascus; but finding his complaints treated with contempt, entered into a treaty with Daher, and concluded an offensive and defensive alliance with him at Rafaen, near Sour. No sooner was Daher united with the Druses, than he laid siege to Bairout by land, whilst two Russian frigates, whose service was purchased by 600 purses, cannonaded it by sea. Djezzar was compelled to submit to force, and, after a vigorous resistance, gave up the city and surrendered himself prisoner. Sheik Daher, charmed with his courage, and flattered with the preference he had given him in the surrender, conducted him to Acre, and showed him every mark of kindness. He even ventured to trust him with a small expedition into Palestine; but Djezzar, on approaching Jerusalem, went over to the Turks, and returned to Damascus. The war of Mohammed Bey breaking out, Djezzar offered his service to the captain Pacha, and gained his confidence. He accompanied him to the siege of Acre; and that admiral, having destroyed Daher, and finding no person more proper than Djezzar to accomplish the designs of the Porte in that country, named him pacha of Saide. Being now, in consequence of this revolution, superior lord to the emir Yousef, Djezzar was mindful of his past injuries, and, by a conduct truly Turkish, feigning alternately gratitude and resentment, he extorted from the emir, within the space of five years, 4,000,000 of French money (above £160,000), a sum the more astonishing as the farm of the country of the Druses did not then amount to 100,000 livres, £4000. In 1784 he made war on him, deposed him, and bestowed the government on the emir of the country of Hasbeya, named Ismael. Yousef, having once more purchased his favor, returned, towards the end of the same year, to Dair-el-Kamar, and even courted his confidence so far as to wait on him at Acre, from whence nobody expected him to return; but Djezzar was too wise to shed blood while there were any hopes of obtaining money: he released the prince, and sent him back with every mark of friendship. The present emir bashir is a descendant of Yousef. He pays 130 purses annually to the pacha of Tripoli, and 400 to the pacha of Saide; and, perhaps, 300 purses more in the way of extraordinary demands, or about £20,750 altogether. He has also to purchase, annually, the friendship of the pacha of Akri, or Acre. This revenue is derived from the whole country situated between Bilad Accar, the north declivity of Mount Libanus, and the immediate neighbourhood of Akri. The internal animosities of the Druses have continued from the middle of the last century: in 1799 or 1800 some of the chiefs of one faction were put to death in the palace of the emir: and the most powerful chief in the country in 1812, was, according to Burckhardt, El-sheikh Beshir, of the Jonbelat tribe: he has a clear income of about £50,000 a year, while that of the emir, his nominal superior, is not above £10,000.

Neither the chief nor the individual emirs maintain troops; they have only persons attached to the domestic service of their houses, and a few black slaves. When the nation makes war, every man, whether sheik or peasant, able to bear arms, is called upon to march. He takes with him a bag of flour, a musket, some bullets, and a small quantity of powder, made in his village, and repairs to the rendezvous appointed by the governor. If it be a civil war, as sometimes happens, the servants, the farmers, and their friends, take up arms for their patron, or the chief of their family, and repair to his standard. In such cases, the parties irritated frequently seem on the point of proceeding to the last extremities; but they seldom have recourse to acts of violence, or attempt the death of each other; mediators always interpose, and the quarrel is appeased the more readily, as each patron is obliged to provide his followers with provisions and ammunition. This system, which produces happy effects in civil troubles, is attended with great inconvenience in foreign wars, as sufficiently appeared in that of 1784. Djezzar, who knew that the whole army lived at the expense of the emir Yousef, aimed at nothing but delay, and the Druses, who were not displeased at being fed for doing nothing, prolonged the operations; but the emir, wearied with paying, concluded a treaty, the terms of which were not a little rigorous for himself, and eventually for the whole nation. 'The ceremonies to which I have been a witness on these occasions,' says M. Volney, 'bear a striking resemblance to the customs of ancient times. When the emir and the sheiks had determined on war at Daer-el-Kamar, criers in the evening ascended the summits of the mountain, and there began to cry with a loud voice: 'To war, to war; take your guns, take your pistols: noble sheiks, mount your horses; arm yourselves with the lance and sabre; rendezvous to-morrow at Daer-el-Kamar. Zeal of God! zeal of combats!' This summons, heard from the neighbouring villages, was repeated there; and, as the whole country is nothing but a chain of lofty mountains and deep valleys, the proclamation passed in a few hours to the frontiers. These voices, from the stillness of the night, the long resounding echoes, and the nature of the subject, had something awful and terrible in their effect. Three days after, 15,000 armed men rendezvoused at Daer-el-Kamar and opera-

ions might have been immediately commenced. We may easily imagine that troops of this kind no way resemble our European soldiers; they had neither uniforms, discipline, nor order. They are a crowd of peasants with short coats, naked legs, and muskets in their hands; differing from the Turks and Mamelukes in that they are all foot; the sheiks and emirs alone have horses, which are of little use from the rugged nature of the country. War there can only be a war of posts. The Druses never risk themselves in the plain, and with reason; for they would be unable to stand the shock of cavalry, having no bayonets to their muskets. Their whole art consists in climbing rocks, creeping among the bushes and blocks of stone; from whence their fire is the more dangerous, as they are covered, fire at their ease, and, by hunting and military sports, have acquired the habit of hitting a mark with great dexterity. They are accustomed to sudden inroads, attacks by night, ambuscades, and all those coups de main which require to fall suddenly on, and come to close fight with the enemy. Ardent in improving their success, easily dispirited, and prompt to resume their courage; daring even to temerity, and sometimes ferocious, they possess above all two qualities essential to the excellency of any troops; they strictly obey their leaders, and are endowed with a temperance and vigor of health, at this day unknown to most civilised nations. In the campaign of 1784 they passed three months in the open air without tents, or any other covering than a sheep-skin; yet there were not more deaths or maladies than if they had remained in their houses. Their provisions consisted, as at other times, of small loaves baked on the ashes or on a brick, raw onions, cheese, olives, fruits, and a little wine. The table of the chiefs was almost as frugal; and we may affirm, that they subsisted 100 days, on what the same number of Englishmen or Frenchmen would not have lived ten. They have no knowledge of the science of fortification, the management of artillery or encampments, nor, in a word, any thing which constitutes the art of war. But had they among them a few persons versed in military science, they would readily acquire its principles, and become a formidable soldiery. This would be the more easily effected, as their mulberry plantations and vineyards do not occupy them all the year, and they could afford much time for military exercises.'

The Druses are considered, throughout the Levant, as restless, enterprising, hardy, and brave even to temerity. Only 500 of them have been seen to enter Damascus in open day, and spread around them terror and carnage. No people are more nice than they, with respect to the point of honor: any offence of that kind, or open insult, is instantly punished by blows of the kandjur or the musket; while, among the inhabitants of the towns, it only excites injurious retorts. This delicacy has occasioned in their manners and discourse a reserve, or, if you will, a politeness, which one is astonished to discover among peasants. It is carried even to dissimulation and falsehood, especially among the chiefs, whose greater interests demand greater attentions. Circumspection is necessary to all, says M. Volney, from the formidable consequences of that retaliation of which I have spoken. These customs may appear barbarous to us; but they have the merit of supplying the deficiency of regular justice, which is necessarily tedious and uncertain in these disorderly and almost anarchical governments. The Druses have another point of honor, that of hospitality. Whoever presents himself at their door, in the quality of a suppliant or passenger, is sure of being entertained and lodged in the most generous and unaffected manner. M. Volney often saw the lowest peasants give the last morsel of bread they had in their houses, to the hungry traveller; and when it was observed to them that they wanted prudence, their answer was, 'God is liberal and great, and all men are brethren.' There are, therefore, no inns in their country any more than in the rest of Turkey. When they have once contracted with their guest the sacred engagement of bread and salt, no subsequent event can make them violate it. Various instances of this are related, which do honor to their character. A few years ago, an aga of the janissaries having been engaged in a rebellion, fled from Damascus and retired among the Druses. The pacha was informed of this, and demanded him of the emir, threatening to make war on him in case of refusal. The emir demanded him of the sheik Talhouk, who had received him; but the indignant sheik replied, 'When have you known the Druses deliver up their guests? Tell the emir, that as long as Talhouk shall preserve his beard, not a hair of the head of his suppliant shall fall!' The emir threatened him with force; Talhouk armed his family. The emir, dreading a revolt, adopted a method practised as juridical in that country. He declared to the sheik, that he would cut down fifty mulberry-trees a-day until he should give up the aga. He proceeded as far as a thousand, and Talhouk still remained inflexible. At length the other sheiks, enraged, took up the quarrel; and the commotion was about to become general, when the aga reproaching himself with being the cause of so much mischief, made his escape without the knowledge even of Talhouk. The Druses have also the prejudices of the Bedouins respecting birth; like them, they pay great respect to the antiquity of families; but this produces no essential inconveniences. The nobility of the emirs and sheiks does not exempt them from paying tribute in proportion to their revenues. It confers on them no prerogatives, either in the attainment of landed property or public employments. Every man, after paying his miri and his rent, is master of his property. In short, by a particular privilege, the Druses pay no fine for their succession: nor does the emir, like the sultan, arrogate to himself original and universal property: there exists nevertheless, in the law of inheritance, an imperfection which produces disagreeable effects. Fathers have, as in the Roman law, the power of preferring such of their children as they think proper: hence it has happened in several families of the sheiks, that the whole property has centered in the same person, who has perverted it to the purpose of intriguing and caballing, while his relations remain, as they well express

it, 'princes of olives and cheese;' that is to say, poor as peasants. In consequence of their prejudices, the Druses do not choose to make alliances out of their own families. They invariably prefer their relation, though poor, to a rich stranger; and poor peasants have been known to refuse their daughters to merchants of Saide and Bairout, who possessed from 12,000 to 15,000 piastres. They observe also, to a certain degree, the custom of the Hebrews, which directed that a brother should espouse his brother's widow; but this is not peculiar to them, for they retain that as well as several other customs of that ancient people, in common with other inhabitants of Syria and all the Arab tribes. In short, the proper and distinctive character of the Druses, is a sort of republican spirit, which gives them more energy than any other subjects of the Turkish government, and an indifference for religion, which forms a striking contrast with the zeal of the Mahommedans and Christians. They are further said to be remarkably domestic and intelligent. In the evening they sometimes assemble in the court, the area, or house of the chief of the village or family. There, seated in a circle, with legs crossed, pipes in their mouths, and poniards at their belts, they discourse of their various labors, the scarcity or plenty of their harvests, peace or war, the conduct of the emir, or the amount of the taxes; they relate past transactions, discuss present interests, and form conjectures on the future. Their children, tired with play, come frequently to listen; and a stranger is surprised to hear them, at ten or twelves years old, recounting, with a serious air, why Djezzar declared war against the emir Yousef, how many purses it cost that prince, what augmentation there will be of the miri, how many muskets there were in the camp, and who had the best mare. This is their only education. They are neither taught to read the psalms, as among the Maronites, nor the Koran like the Mahommedans; hardly do the sheiks know how to write a letter. But if their minds be destitute of useful or agreeable information, at least it is not pre-occupied by false and hurtful ideas; and, without doubt, such natural ignorance is well worth all our artificial folly. This advantage results from it, that their understandings being nearly on a level, the inequality of conditions is less perceptible. For, in fact, we do not perceive among the Druses that great distance, which, in most other societies, degrades the inferior, without contributing to the advantages of the great. All, whether sheiks or peasants, treat each other with that rational familiarity, which is equally remote from rudeness and servility. The grand emir himself is not a different man from the rest: he is a good country gentleman, who does not disdain admitting to his table the meanest farmer. In a word, their manners are those of ancient times, and of that rustic life which marks the origin of every nation; and prove that the people among whom they are still found are yet only in the infancy of the social state.' *Volney's Travels.*

The opinions of Mohammed ben Ismael may be regarded as the substance of the religion of the Druses. They practise neither circumcision, nor prayers, nor fasting; they observe neither festivals nor prohibitions. They drink wine, eat pork, and allow marriage between brothers and sisters, though not between fathers and children. From this we may conclude, that the Druses have properly no religion; but one class of them must be excepted, whose religious customs are very peculiar. Those who compose it are to the rest of the nation what the initiated were to the profane; they assume the name of Okkals, which means spiritualists, and bestow on the vulgar the epithet of Djahel or ignorant; they have various degrees of initiation, the highest orders of which require celibacy. These are distinguished by the white turban they affect to wear, as a symbol of their purity; and so proud are they of this supposed purity, that they think themselves sullied by even touching a profane person. If such eat out of their plate, or drink out of their cup, they break them; and hence the custom, so general in this country, of using vases with a sort of cock, which may be drunk out of without touching them with the lips. All their practices are enveloped in mysteries: their oratories always stand alone, and are constantly situated on eminences: in these they hold their secret assemblies, to which women are admitted. It is pretended they perform ceremonies there, in presence of a small statue resembling an ox or calf; whence some have attempted to prove that they are descended from the Samaritans. But, besides, that the fact is not well ascertained, the worship of the ox may be deduced from other sources. They have one or two books which they conceal with the greatest care: but chance has deceived their jealousy; for in a civil war, which happened about twenty-eight years ago, the emir Yousef, who is Djahel or ignorant, found one among the pillage of one of their oratories. M. Volney was assured by persons who had read it, that it contains only a mystic jargon, the obscurity of which doubtless renders it valuable to adepts. Hakem Bamr Ellah is there spoken of, by whom they mean God incarnate in the person of the caliph. It likewise treats of another life, of a place of punishment, and a place of happiness, where the Okkals shall of course be most distinguished. Several degrees of perfection are mentioned, to which they arrive by successive trials. In other respects these sectaries have all the insolence and all the fears of superstition; they are not communicative, because they are weak; but it is probable that, were they powerful, they would be promulgators and intolerant. The rest of the Druses, strangers to this spirit, are wholly indifferent about religious matters. The Christians, who live in their country, pretend that several of them believe in the metempsychosis; that others worship the sun, moon, and stars: all which is possible; for, as among the Ansarians, every one, left to his own fancy, follows the opinion that pleases him most; and these opinions are those which present themselves most naturally to unenlightened minds. When among the Turks, they affect the exterior of Mahommedans, frequent the mosques, and perform their ablutions and prayers. Among the Maronites, they ac-

company them to church, and, like them, make use of holy water. Many of them, importuned by the missionaries, suffer themselves to be baptised; and if solicited by the Turks, receive circumcision, and conclude by dying neither Christians nor Mahommedans.

Mr. Burckhardt confirms this general picture of former travellers. Though a sect of the Mahommedans, they mingle so much of the tenets of Zoroaster and the eastern Christian heretics with their religion, that it belongs as a whole to themselves only. Niebuhr has printed a catechism of their faith, which is principally remarkable for its affected mysteriousness on the one hand, and its positive injunction to curse its original author (a great poet) on the other. 'We are they,' says their patriarch Hamzah, 'who have been put in possession of the Faith after the religion of Mahomet, the son of Abdullah; may the curse of our Lord be upon him!'

They are a branch, it is clear, of the sect Ismayly. 'Enquiries,' says Burckhardt, 'have often been made concerning the religious doctrines of this sect, as well as those of the Anzeyrys and Druses. Not only European travellers, and Europeans resident in Syria, but many natives of influence, have endeavoured to penetrate the mysteries of these idolaters, without success, and several causes combine to make it probable, that their doctrines will long remain unknown. The principal reason is, that few individuals among them become acquainted with the most important and secret tenets of their faith, the generality contenting themselves with the observance of some exterior practices, while the arcana are possessed by the select few. It will be asked, perhaps, whether their religious books would not unveil the mystery? It is true that all the different sects possess books, which they regard as sacred, but they are intelligible only to the initiated. A sacred book of the Anzeyrys fell into the hands of a chief of the army of Yousef pacha, who plundered the castles of that sect in 1808; it came afterwards into the possession of my friend Selym of Hamah who had destined it as a present to me; but he was prevailed upon to part with it to a travelling physician, and the book is now in the possession of M. Rousseau, the French Consul at Aleppo, who has had it translated into French, and means to publish it, but it will probably throw little light upon the question. Another difficulty arises from the extreme caution of the Ismaylys upon this subject; whenever they are obliged to visit any part of the country under the Turkish government, they assume the character of Mussulmans; being well aware that if they should be detected in the practice of any rite contrary to the Turkish religion, their hypocrisy, in affecting to follow the latter, would no longer be tolerated; and their being once clearly known to be pagans, which they are only suspected to be at present, would expose them to the heaviest exactions, and might even be followed by their total expulsion or extirpation. Christians and Jews are tolerated because Mahomet and his immediate successors granted them protection, and because the Turks acknowledge Christ and the prophets; but there is no instance whatever of pagans being tolerated.

'The Ismaylys, when they go to Hamah, pray in the mosque, which they never do at Kalaat Maszyad. This castle has been from ancient times their chief seat. One of them asserted that his religion descended from Ismayl, the son of Abraham, and that the Ismaylys had been possessed of the castle since the time of El Melek el Dhaher, as acknowledged by the Firmahns of the Porte. A few years since they were driven out of it by the Anzeyrys, in consequence of a most daring act of treachery. The Anzeyrys and Ismaylys have always been at enmity; the consequence, perhaps, of some religious differences.'

With respect more particularly to the true religion of the Druses,' says this intelligent traveller, 'none but a learned Druse can satisfy the enquirer's curiosity. What I have already said of the Anzeyrys is equally applicable to the Druses; their religious opinions will remain for ever a secret, unless revealed by a Druse. Their customs, however, may be described; and, as far as they can tend to elucidate the mystery, the veil may be drawn aside by the researches of the traveller. It seems to be a maxim with them to adopt the religious practices of the country in which they reside, and to profess the creed of the strongest. Hence they all profess Islamism in Syria; and even those who have been baptised, on account of their alliance with the Shehab family, still practise the exterior forms of the Mahommedan faith. There is no truth in the assertion, that the Druses go one day to the mosque, and the next to the church. They all profess Islamism, and whenever they mix with the Mahommedans they perform the rites prescribed by their religion. In private, however, they break the fast of Ramadhan, curse Mahomet, indulge in wine, and eat food forbidden by the Koran. They bear an inveterate hatred to all religions except their own, but more particularly to that of the Franks, chiefly in consequence of a tradition current among them, that the Europeans will one day overthrow their commonwealth. This hatred has been increased since the invasion of the French; and the most unpardonable insult which one Druse can offer to another, is to say to him, 'May God put a hat on you.'

'Nothing is more sacred with a Druse than his public reputation: he will overlook an insult, if known only to him who has offered it; and will put up with blows, where his interest is concerned, provided nobody is a witness; but the slightest abuse given in public he revenges with the greatest fury. This is the most remarkable feature of the national character: in public a Druse may appear honorable; but he is easily tempted to a contrary behaviour, when he has reason to think that his conduct will remain undiscovered. The ties of blood and friendship have no power amongst them; the son no sooner attains the years of maturity, than he begins to plot against his father. Examples are not wanting of their assailing the chastity of their mothers, and towards their sisters such conduct is so frequent, that a father never allows a full grown son to remain alone with any of the fe-

males of his family. Their own religion allows them to take their sisters in marriage; but they are restrained from indulging in this connexion, on account of its repugnance to the Mahommedan laws. A Druse seldom has more than one wife, but he divorces her under the slightest pretext; and it is a custom among them, that if a wife asks her husband's permission to go out, and he says to her 'Go;' without adding 'and come back,' she is thereby divorced; nor can her husband recover her, even though it should be their mutual wish, till she is married again according to the Turkish forms, and divorced from her second husband. It is known that the Druses, like all Levantines, are very jealous of their wives; adultery, however, is rarely punished with death: if a wife is detected in it, she is divorced; but the husband is afraid to kill her seducer, because his death would be revenged, for the Druses are inexorable with respect to the law of retaliation of blood; they know too that if the affair were to become public, the governor would ruin both parties by his extortions. Unnatural propensities are very common amongst them.

'The Akal are those who are supposed to know the doctrines of the Druse religion; they superintend divine worship in the chapels, or, as they are called, Khaloue, and they instruct the children in a kind of catechism. They are obliged to abstain from swearing, and all abusive language, and dare not wear any article of gold or silk in their dress. Many of them make it a rule never to eat of any food, nor to receive any money, which they suspect to have been improperly acquired. For this reason, whenever they have to receive considerable sums of money, they take care that it shall be first exchanged for other coin. The sheik El Nedjem, who generally accompanies the sheik Beshir, in his visits to the emir, never tastes food in the palace of the latter, nor even smokes a pipe there, always asserting that whatever the emir possesses has been unlawfully obtained. There are different degrees of Akal, and women are also admitted into the order, a privilege which many avail themselves of, from parsimony, as they are thus exempted from wearing the expensive head-dress and rich silks fashionable among them.

'A father cannot entirely disinherit his son; in that case his will would be set aside; but he may leave him a single mulberry-tree for his portion. There is a Druse Kadhi at Daer-el Kamar, who judges according to the Turkish laws, and the customs of the Druses; his office is hereditary in a Druse family; but he is held in little repute, as all causes of importance are carried before the emir or the sheik Beshir.

'The Druses do not circumcise their children; circumcision is practised only in the mountain by those members of the Shehab family who continue to be Mahommedans.

'The best feature in the Druse character is that peculiar law of hospitality, which forbids them ever to betray a guest. I made particular enquiries on this subject, and I am satisfied that no consideration of interest or dread of power will induce a Druse to give up a person who has once placed himself under his protection. Persons from all parts of Syria are in the constant practice of taking refuge in the mountain, where they are in perfect security from the moment they enter upon the emir's territory: should the prince ever be tempted by large offers to consent to give up a refugee, the whole country would rise to prevent such a stain upon their national reputation. The mighty Djezzar, who had invested his own creatures with the government of the mountain, never could force them to give up a single individual of all those who fled thither from his tyranny. Whenever he became very urgent in his demands, the emir informed the fugitive of his danger, and advised him to conceal himself for a time in some more distant part of his territory; an answer was then returned to Djezzar, that the object of his resentment had fled. The asylum which is thus afforded by the mountain is one of the greatest advantages that the inhabitants of Syria enjoy over those of the other parts of the Turkish dominions.

'The Druses are extremely fond of raw meat; whenever a sheep is killed, the raw liver, heart, &c., are considered dainties; the Christians follow their example, but with the addition of a glass of brandy to every slice of meat. In many parts of Syria I have seen the common people eat raw meat in their favorite dish the Kobbes; the women especially indulge in this luxury.

'Mr. Barker told me that during his two years' residence at Harissa and in the mountain, he never heard any kind of music. The Christians are too devout to occupy themselves with such worldly pleasures, and the Druses have no sort of musical instruments.

'The Druses have a few historical books which mention their nation; Ibn Shebat, for instance, as I was told, gives in his history of the Califes, that of the Druses also, and of the family of Shehab. Emir Haidar a relation of the emir Beshir, has lately begun to compile a history of the Shehabs, which already forms a thick quarto volume.

'I believe that the greatest amount of the military forces of the Druses is between 10,000 and 15,000 firelocks; the Christians of the mountain may, perhaps, be double that number; but I conceive that the most potent pacha or emir would never be able to collect more than 20,000 men from the mountain.' Travels, p. 200—204.

DRUSIUS (John), a protestant writer of great learning, born at Oudenarde in Flanders, in 1555. He was designed for the study of divinity, but his father being outlawed, and deprived of his estate, they both retired to England, where the son became professor of the oriental languages at Oxford: upon the pacification of Ghent, they returned to their own country, where also Drusius was appointed professor of oriental languages. From thence he removed to Friesland, where he was admitted Hebrew professor in the university of Franeker; the functions of which he discharged with great honor till his death in 1616. His works show him to have been well skilled in Hebrew; and the States General employed him in 1600 to write notes on the most difficult passages in the Old Testament, with a pension of 400 florins a-year: but, being frequently disturbed in this undertaking, it was

not published till after his death. He held a large correspondence with the learned; among his papers there were found 2300 Latin letters.

DRUSIUS (John), the son of the preceding, was born at Franeker in 1588; and began to learn Latin and Hebrew at five years old; at nine he could read that language without points, and add them where wanted. He spoke Latin as readily as his native tongue, and could make himself understood in English. At twelve he wrote in Hebrew extempore; at seventeen he made a speech in Latin to king James I. in the midst of his court, and was admired by all present. He died of the stone, in 1609, aged twenty-one, at the house of Dr. W. Thomas, dean of Chichester, who gave him a considerable salary. He left several works; as, Letters and Verses in Hebrew; Notes on Solomon's Proverbs; &c. And digested into alphabetical order Elias Levita's Nomenclator; to which he added the Greek words.

DRY, *adj. v. a.* & *v. n.*
DRY'ER, *n. s.*
DRY'EYED, *adj.*
DRY'LY, *adv.*
DRY'NESS, *n. s.*
DRY'NURSE, *v. a.* & *n. s.*
DRY'SHOD, *adj.*

Goth *thur*; Sax. drig; Teut. *treig*; Belg. *droog*, from Gr. τρυγη, dryness. Arid; free from moisture: hence barren, and, figuratively, jejune, deficient; hard; severe; sneering. The verbs seem to have been formed from the adjective.

And he seide to it, nevere fruyt come forth of thee into withouten ende; and anoon the fige-tree was *dried* up: and disciplis sighen wondriden and seiden, hout anoon it *driede*. *Wiclif. Matt.* xxi.

Their honourable men are famished, and their multitude *dried* up with thirst. *Isaiah* v. 13.

Dryshod to pass, she parts the floods in tway;
And eke huge mountains from their native seat
She would command themselves to bear away.
Faerie Queene.

I will drain him *dry* as hay;
Sleep shall neither night nor day
Hang upon his penthouse lid:
He shall live a man forbid.
Shakspeare. Macbeth.

The meat was well, if you were so contented.
—I tell thee, Kate, 't was burnt and *dried* away.
Shakspeare.

If he filled
His vacancy with his voluptuousness,
Full surfeits, and the *dryness* of his bones,
Call on him for 't. *Id. Antony and Cleopatra.*

Mrs. Quickly is his nurse, or his *drynurse*, or his cook, or his laundry, his washer, and his wringer.
Shakspeare.

A *dry* March and a *dry* May portend a wholesome summer, if there be a showering April between.
Bacon.

Of two noblemen, the one was given to scoff, but kept every royal cheer in his house, the other would ask of those that had been at his table, was there never a flout or *dry* blow given? *Id.*

There is a tale, that boiling of daisy roots in milk, which it is certain are great *driers*, will make dogs little. *Id.*

The archduke, conscious to himself how *dryly* the king had been used by his council, did strive to recover the king's affection. *Id. Henry VII.*

As we should take care that our stile in writing be neither *dry* nor empty, we should look again it be not winding or wanton with far-fetched descriptions: either is a vice. *Ben Jonson.*

Their new flowers and sweetness do as much corrupt as others *dryness* and squalor, if they chuse not carefully. *Id.*

It remaineth to treat concerning ornaments within or without the fabrick; a piece not so *dry* as the meer contemplation of proportions: and therefore I hope therein somewhat to refresh both the reader and myself. *Wotton's Architecture.*

When they have flesh, yet they must stay a time ere they can have a full meal; unless they would eat their meat breadless, and their bread *dry*.
Bp. Hall. Contemplations.

I find that an evil fountain is not soon drawn *dry*.
Bp. Taylor.

It may be, that by this *dryness* of spirit, God intends to make us the more fervent and resigned in our direct and solemn devotions, by the perceiving of our weakness. *Id.*

That the fire burns by heat, is an empty *dry* return to the question, and leaves us still ignorant.
Glanville.

When God said,
Be gathered now, ye waters under heaven,
Into one place, and let *dry* land appear!
Milton.

Sight so deform what heart of rock could long *Dryeyed* behold? Adam could not, but wept. *Id.*

I rather hoped I should no more
Hear from you o' th' gallanting score;
For hard *dry* bastings used to prove
The readiest remedies of love;
Next a *dry* diet. *Hudibras.*
As Romulus a wolf did rear,
So he was *drynursed* by a bear. *Id.*

The Africans are conceived to be peculiarly scorched and torrified by the sun, by *dryness* of the soil, from want and defect of water.
Browne's Vulgar Errours.

The ill effects of drinking are relieved by this plant, which is a great *dryer* and opener, especially by perspiration. *Temple.*

It is a *dry* fable, with little or nothing in it.
L'Estrange.

'Twas grief no more, or grief and rage were one
Within her soul: at last 'twas rage alone;
Which, burning upwards in succession, *dries*
The tears that stood considering in her eyes.
Dryden.

Has honour's fountain then sucked back the stream?
He has: and hooting boys may *dryshod* pass,
And gather pebbles from the naked ford. *Id.*

Wouldst thou to honour and preferments climb,
Be bold in mischief, dare some mighty crime,
Which dungeons, death, or banishment deserves;
For virtue is but *dryly* praised, and starves.
Id. Juvenal.

He had embarked us in such disadvantage, as we could not return *dryshod*. *Sidney.*

A palsy may as well shake an oak, or a fever *dry* up a fountain, as either of them shake, *dry* up, or impair the delight of conscience. *South.*

The marrow supplies an oil for the inunction of the bones and ligaments in the articulations, and particularly of the ligaments, preserving them from *dryness* and rigidity, and keeps them supple and flexible.
Ray on the Creation.

To clear up this theory, I was willing to lay aside *dry* subtilties with which the schools are filled.
Burnet's Theory.

Is the sea ever likely to be evaporated by the sun, or to be emptied with buckets? Why then must we

fancy this impossible *dryness*, and then, upon that fictitious account, calumniate nature? *Bentley.*

There are a set of *dry*, joyless, dull fellows, who want capacities and talents to make a figure amongst mankind upon benevolent and generous principles. *Guardian.*

The weather, we agreed, was too *dry* for the season. *Addison.*

Be faithful where the author excels, and paraphrase where penury of fancy or *dryness* of expression ask it. *Garth.*

As to the business of being profound, it is with writers as with wells; a person with good eyes may see to the bottom of the deepest, provided any water be there: and that often, when there is nothing in the world at the bottom besides *dryness* and dirt, though it be but a yard and a half under ground, it shall pass, however, for wondrous deep, upon no wiser a reason than because it is wondrous dark. *Swift.*

These epistles will become less *dry*, and more susceptible of ornament. *Pope.*

Some *dryly* plain, without invention's aid,
Write dull receipts how poems may be made. *Id.*

Rash Elpenor, in an evil hour,
Dried an immeasurable bowl, and thought
T' exhale his surfeit by irriguous sleep,
Imprudent: him death's iron sleep opprest. *Philips.*

The water of the sea, which formerly covered it, was in time exhaled and *dried up* by the sun. *Woodward.*

Of turbid elements the sport;
From clear to cloudy tost, from hot to cold,
And *dry* to moist. *Thomson.*

You cannot pump the ocean *dry*; and as long as it continues in its present bed, so long all the causes which weaken authority by distance will continue. *Burke on the American War.*

He purposes to take up and reform, whenever his appetites are fully gratified; like the rustic, whose plan was, to wait till the water of the river should run by, and then pass over *dry-shod.* *Beattie.*

A beard like an artichoke, with *dry* shrivelled jaws, that would disgrace the mummy of a monkey! *Sheridan.*

DRYADES, or DRYADS, in the heathen mythology, a sort of deities, who, the ancients believed, inhabited groves and woods. They differed from the Hamadryades; these latter being attached to some particular tree, with which they were born, and with which they died; whereas the Dryads were goddesses of trees and woods in general. See HAMADRYADES.

DRYANDER (John), A.M. university of Lund, a Swedish naturalist, the pupil and friend of Linnæus, was born in 1748, near Gottenburgh, where his father was a clergyman. In consequence of the decease of his father, the care of his education devolved on a maternal uncle, Dr. Lars Montin, a member of the Stockholm Academy. This gentleman was also the intimate friend of Linnæus, and published under his presidency, an Inaugural Dissertation on the Genus Splachnum, reprinted in the Amœnitates Academicæ, vol. ii. 263. Young Dryander received his early education in the university of Gottenburgh; but removed to Lund, where he took his degree of Master of Arts, or Doctor of Philosophy, in 1776; he published on this occasion a dissertation, Fungos Regno Vegetabili Vindicans, asserting the vegetable nature of these bodies. He was afterwards a student for a short time at Upsal, and tutor to a young Swedish nobleman. He first visited England with his countryman Dr. Solander, who introduced him to the acquaintance of Sir Joseph Banks; and on whose sudden death, in 1782, he succeeded to the place of librarian to Sir Joseph. Mr. Dryander was also librarian to the Royal and the Linnæan Societies. Of the latter institution he was indeed one of the first founders, and drew up its laws and regulations, when in 1802 the society was incorporated by royal charter. He continued an able and active vice-president of the society until his death, which took place towards the end of October, 1810, in the sixty-third year of his age. The publications of Mr. Dryander on the subject of botany are very valuable, and consist of, 1. An Account of the Genus Albuca, in the Stockholm Transactions for 1784, in Swedish. 2. Observations on the Genus Begonia, in the Transactions of the Linnæan Society, vol. i. 3. On Genera and Species of Plants which occur twice or three times in Professor Gmelin's edition of Linnæus' Systema Naturæ; Trans. of Linn. Soc. v. ii. 4. Lindsea, a New Genus of Ferns; Trans. of Linn. Soc. v. iii. 5. A Botanical Description of the Benjamin Tree of Sumatra, Phil. Trans. v. lxxvii. He also superintended and assisted in the publication of Mr. Aiton's Hortus Kewensis, and Dr. Roxburgh's Plants of the Coast of Coromandel. But his Catalogus Bibliothecæ Historico-Naturalis Josephi Banks, 5 vols. 8vo. is his most celebrated work, and a model for all future bibliographers.

DRYANDRA, in botany, a genus of plants of the class dicœcia, order monadelphia: CAL. two-leaved; petals five; stamens nine: FRUIT three or four grained: SEEDS solitary. Species one only; a dwarf tree of Japan.

DRYAS, in botany, a genus of the polygynia order, and icosandria class of plants; natural order thirty-fifth, senticosæ: CAL. octofid; petals eight: SEEDS long and hairy with a train. Species, one only; a native of Denmark, and sometimes found on our own mountains.

DRYBURGH ABBEY. This place was dedicated to religious institutions so anciently as the year 522, when Modan, a presbyter and missionary was there seated; as appears by records cited in Chalmers de Statu Hominis, veteris simul ac novæ Ecclesiæ, b. i. p. 142; and King, in his Kalendar. Breviar. Aberdeen. There is no doubt that the Roman station of Trimontium was at the foot of the Eilden hills, in this district, about three miles distant from Dryburgh; as appears from the Antonine Itinerary, and from General Roy's Survey and Map of Roman Scotland. Many coins of Vespasian, Domitian, and Trajan, are found in this neighbourhood; and a considerable part of the Roman road is still in good preservation, passing through the parishes of Ancrum, Lillies-leaf, and Maxton. In the abbey of Dryburgh, Chaucer, the English poet, passed some time with his friend Ralph Strode, a Welshman, a monk and student here, to whom Chaucer dedicates or addresses some of his verses. At the Reformation, the abbey lands were erected into a temporal lordship

y James VI. in favor of John earl of Marr, K. G. and lord high treasurer of Scotland; who ave it to Henry his third son, from whom the itle descended to the present earl of Buchan, who bought the abbey lately from the heirs of olonel Tod, and has made it his principal resilence. It was here that James Thomson composed his beautiful poem of Winter, the first of his classical Seasons; having occasionally resided with the Haliburtons of Newmains, who were hen proprietors of the place. Thomas Hannah, n astronomer of considerable merit, was born iere, in a house built in the area of the abbey, n 1662; on whom Allan Ramsay the poet composed an epitaph for his tomb in Kelso church-yard, which is still extant.

DRYDEN (John), one of the most eminent English poets of the seventeenth century, descended of a respectable family in Huntingdonshire, was born at Aldwinkle 1631, and educated at Westminster school under Dr. Busby. Thence he was removed to Cambridge in 1650, being elected scholar of Trinity College, of which he appears, by his Epithalamia Cantabrigiens. 4to, 1662, to have been afterwards a fellow. On the death of Oliver Cromwell he wrote some heroic stanzas to his memory; but on the Restoration, being desirous of ingratiating himself with the new court, he wrote first a poem entitled Astræa Redux, and afterwards a panegyric on the king. On the 1st January, 1662, he addressed a poem to Chancellor Hyde; and published in the same year a satire on the Dutch. In 1668 appeared his Annus Mirabilis, an historical poem in celebration of the duke of York's victory over the Dutch. These pieces at length obtained him the favor of the crown; and Sir William Davenant dying at this period, Dryden was appointed to succeed him as poet laureat. In 1669 he produced the Wild Gallants, his first comedy. This met with very indifferent success; yet the author, not discouraged by its failure, soon after published his Indian Emperor. Other pieces now followed with such rapidity, that in the key to the duke of Buckingham's Rehearsal he is recorded to have engaged himself by contract, to write four plays per year; and in the years 1679 and 1680, he appears to have fulfilled it. To this may be attributed those irregularities, bombastic flights, and even puerile exuberances, for which he has been so severely criticised. In 1675 the earl of Rochester, who was chagrined at the applause with which Dryden's dramatic pieces had been received, was determined if possible to shake his interest at court; and succeeded so far as to recommend a Mr. Crowne, at that time of obscure reputation, to write a mask; an honor which certainly belonged to Dryden's office. The duke of Buckingham also most severely ridiculed several of our author's plays at this time, in his admired Rehearsal. Dryden, however, did not suffer these attacks to pass with impunity; for in 1679 there came out an Essay on Satire, said to be written jointly by that gentleman and the earl of Mulgrave, containing some very severe reflections on earl Rochester and the duchess of Portsmouth; and in 1681 he published his Absalom and Ahitophel, in which the well-known character of Zimri, drawn for the duke of Buckingham, is certainly severe enough to repay all the ridicule of that nobleman. The resentment shown by the two peers was very different. Lord Rochester, who was a coward, as well as a man of the most depraved morals, basely hired three ruffians to cudgel Dryden in a coffee-house; but the duke of Buckingham took the task upon himself; and at the same time presented him with a purse containing a large sum of money; telling him that he gave him the beating as a punishment for his impudence, but bestowed that gold on him as a reward for his wit. In 1682 Dryden published his Religio Laici, designed as a defence of revealed religion against Deists, Papists, &c. Soon after the accession of James II. he went over to the church of Rome, and wrote two pieces in vindication of the Romish tenets: viz. A defence of the Papers written by the late king, found in his strong box; and the celebrated poem, afterwards answered by lord Halifax, entitled, The Hind and the Panther. By this extraordinary step he not only engaged himself in controversy, and incurred much censure and ridicule from his contemporary wits: but on the completion of the Revolution, being, on account of his newly-chosen religion, disqualified from bearing any office under the government, he was stripped of the laurel, which, to his still greater mortification, was bestowed on Richard Flecknoe, a man to whom he had a most settled aversion. This circumstance occasioned his writing the very severe poem called Mac-Flecknoe. Mr. Dryden's circumstances had never been affluent; but now, being deprived of this little support, he found himself reduced to the necessity of writing for bread. From this period, therefore, he was engaged in works of labor as well as genius, translating the works of others, &c.; and to this necessity we stand indebted for some of our best translations. In the year he lost the laurel, he published the life of St. Francis Xavier from the French. In 1693 came out his Juvenal and Persius. In 1695 his prose version of Fresnoy's Art of Painting; and in the year 1697 a translation of Virgil's entire work, which still stands foremost among the translations of that author. The minor pieces of this eminent writer, viz. his prologues, epilogues, epitaphs, elegies, songs, &c. are too numerous to specify here, but may all be found in the elegant editions of this poet by Sir Walter Scott, Malone, and Dr. Warton. His last work is his Fables, which consist of many of the most interesting stories in Homer, Ovid, Boccace, and Chaucer, translated or modernised in the most elegant manner; together with some original pieces, among which is the celebrated ode on St. Cecilia's day. Dryden married the lady Elizabeth Howard, sister to the earl of Berkshire, who survived him eight years. By this lady he had three sons, Charles, John, and Henry. Of the eldest there is a circumstance related by Charles Wilson, esq. in his Life of Congreve, which seems so well attested, and is itself of so very extraordinary a nature that we cannot avoid giving it a place here. Dryden, with all his understanding, was weak enough to be fond of judicial astrology, and used to calculate the nativity of his children. On

casting that of Charles he found, according to the rules by which he calculated, that his eighth, twenty-third, and thirty-third years were of peculiar omen. In his eighth year, notwithstanding his father's precautions, he went out on his birth-day to see a stag hunted, and the animal flung down on him a wall ten feet in length which was nearly fatal to him. In his twenty-third year he fell from the top of a tower in the Vatican, and never fully recovered his health; and in his thirty-third year he was drowned in swimming across the Thames near Windsor.

Dryden died May 1701, and was buried in Westminster Abbey. The day after his death, the dean of Westminster sent a message to his widow, that he would make a present to her of the ground and all other abbey-fees for the funeral; lord Halifax likewise sent to lady Elizabeth, and to Mr. Charles Dryden, offering to defray the expenses of our poet's funeral, and afterwards to bestow £500 on a monument in the abbey. Accordingly, on Sunday following, the company being assembled, the corpse was put into a hearse and attended by eighteen mourning coaches. When they were just ready to move, lord Jefferys, son of lord chancellor Jefferys, a name dedicated to infamy, riding by with some of his companions, asked whose funeral it was; and being told it was Mr. Dryden's, he protested he should not be buried in that private manner; that he would himself, with lady Elizabeth's leave, have the honor of the interment, and bestow £1000 on a monument in the abbey for him. This put a stop to the procession; and lord Jefferys, with several of the gentlemen who had alighted from their coaches, went up stairs to the lady, who was sick in bed. His lordship repeated the purport of what he had said below; but lady Elizabeth refusing her consent, he fell on his knees, vowing never to rise till his request was granted. The lady under a sudden surprise fainted away; and lord Jefferys, pretending to have obtained her consent, ordered the body to be carried to Mr. Russel's an undertaker in Cheapside, and to be left there till further orders. In the mean time the abbey was lighted up, the ground opened, the choir attending, and the bishop of Rochester waiting some hours to no purpose for the corpse. The next day Mr. Charles Dryden waited on lord Halifax and the bishop, and endeavoured to excuse his mother by relating the truth. Three days after, the undertaker having received no orders, waited on lord Jefferys; who pretended that it was a drunken frolic, that he remembered nothing of the matter, and he might do what he pleased with the body. Upon this the undertaker waited upon lady Elizabeth, who desired a day's respite, which was granted. Mr. Charles Dryden immediately wrote to lord Jefferys, who returned for answer, that he knew nothing of the matter, and would be troubled no more about it. Mr. Dryden hereupon applied again to lord Halifax and the bishop of Rochester, who absolutely refused to do any thing in the affair. In this distress, Dr. Garth, who had been Mr. Dryden's intimate friend, sent for the corpse to the college of physicians, and proposed a subscription; which succeeding, about three weeks after Mr. Dryden's decease, Dr. Garth pronounced a fine Latin oration over the body, which was conveyed from the college, attended by a numerous train of coaches to Westminster Abbey, but in great disorder. It was interred in a private manner. After the funeral Charles Dryden sent a challenge to lord Jefferys, and repeatedly sought admittance to him to provoke a duel, or to chastise him for the above barbarous indignity, in vain. Dryden had no monument erected to him for several years, to which Mr. Pope alludes in his epitaph intended for Mr. Rowe, in this line,

Beneath a rude and nameless stone he lies.

In a note upon which we are informed, that the tomb of Mr. Dryden was erected upon this hint by Sheffield, duke of Buckingham, to which was originally intended this epitaph:

This Sheffield raised.—The sacred dust below
Was Dryden once; the rest, who does not know!

Which was afterwards changed into the plain inscription now upon it, viz.

J. DRYDEN,
Natus Aug. 9, 1631.
Mortuus Maii 1, 1701.
Johannes Sheffield, dux Buckinghamiensis, fecit.

Were we to form a judgment of this celebrated writer from some of his dramatic writings, we should be apt to conclude him a man of the most licentious morals; many of his comedies containing gross obscenity. But Congreve, whose authority cannot be suspected, has depicted him as no less amiable in his private character as a man, than he was illustrious in his public one as a poet. He was, according to this authority, humane, compassionate, forgiving, and friendly; gentle in the correction of the writings of other authors, and patient under the censure of his own; easy of access himself, but slow and diffident in his advances to others; and of all men the most modest, and the most easy to be discountenanced in his approaches either to his superiors or his equals. As to his writings, he has been thought to have attained the greatest general harmony in his numbers, of any of our poets.

DRYPIS, in botany, a genus of the trigynian order, and pentandria class of plants; natural order twenty-second, caryophylleæ: CAL. quinquedentated: petals five; the opening at the capsule as if cut round horizontally, monospermous. Species one only, a native of Barbary and Italy.

DRYSDALE (John), D. D., a late eminent clergyman of the church of Scotland, was born at Kirkaldy, April 29th 1718. He soon distinguished himself as a classical scholar, and, in 1732, was sent to finish his studies at the university of Edinburgh. In 1740 he was licensed to preach by the presbytery of Kirkaldy; and, after having been several years employed as assistant minister of the college church at Edinburgh, was settled at Kirkliston in 1748. After continuing fifteen years in this town, he obtained a presentation to Lady Yester's church, from the town-council of Edinburgh. This having been the

ime the magistrates of Edinburgh had exercised heir right of presentation, a most formidable pposition was now made to his settlement. The pposition however, which was more against the neasure than the man, being at last overcome, ie was settled as minister of Lady Yester's. In 765 the Marischal College of Aberdeen conerred on him the degree of D. D. In 1766, on he death of Dr. Jardine, he was translated to he Tron church, where he became colleague to Dr. Wishart; and was also appointed one of the ing's chaplains, with one-third of the emoluments of the deanery of the chapel royal. In 1773 ie was unanimously elected moderator of the General Assembly; 'the greatest mark of respect,' ays professor Dalzel, 'which an ecclesiastical ommonwealth can bestow;' and in 1784 he was gain raised to the same dignity, by a great maority. In May, 1788, he appeared in his place it the meeting of the Assembly, and acted as principal clerk the first day; but was obliged to isk the assistance of professor Dalzel during the emaining days; and, being violently attacked vith a cough, became gradually weaker, till he died on the 16th June following, aged seventy. Dr. Drysdale's sermons have been published since his leath, and are esteemed a valuable addition to he public stock of instruction.

DSJEDSJAL, a sect of Mahommedan Arabs, chiefly inhabiting Mecran, a maritime province of Persia. 'Its first author,' says Mr. Niebuhr, was a venerable old man, who was found by ome wood-cutters shut up in the middle of a ree, and having a book in his hand.' This miaculous origin he was informed of at Mascat, but 'each sect,' he adds, 'tells ridiculous stories of the others, to bring them into conempt.'

DSJOBLA, an ancient city of Arabia, in the province of Yemen; the capital of a district and he seat of a Dola; seated on the brink of a precipice, and containing about 600 houses, of considerable height and of good appearance. Its streets are paved.

DU'AL, *adj.* Lat. *dualis*, from *duo*; Gr. δυω; Chald. רו, two. Expressing two.

Modern languages have only one variation, and so he Latin; but the Greek and Hebrew have one to ignify two, and another to signify more than two, under one variation the noun is said to be of the *dual* number, and under the other of the plural.

Clarke's Latin Grammar

DUB, *v. a.* & *n s.* Goth. *dubba*; Sax. dubben; Fr. *adouber*. The Northern words mean o strike, and have been thought to allude to the mode of making a knight by a slight blow with a sword. To make a knight. To confer any kind of dignity or honor. Butler uses it as a substantive for a blow.

Knight, knight, good mother! Basilisco like.
What! I am *dubbed*; I have it on my shoulder.
Shakspeare.

He
Gave thee no instance why thou shouldst do treason,
Unless to *dub* thee with the name of traitor. *Id.*

The jealous o'erworn widow and herself,
Since that our brother *dubbed* them gentlewomen,
Are mighty gossips in this monarchy.
Id. Richard III.

The robes which the kings then allowed to each knight, when he was *dubbed*, of green, or burnet, as they spake in that age, appeareth upon record.
Camden's Remains.

The king stood up under his cloth of state, took the sword from the lord protector, and *dubbed* the lord mayor of London knight. *Hayward on Edward VI.*

As skilful coopers hoop their tubs
With Lydian and with Phrygian *dubs*. *Hudibras.*

O poet! thou hadst been discreeter,
Hanging the monarch's hat so high,
If thou hadst *dubbed* thy star a meteor,
That did but blaze, and rove, and die. *Prior.*

These demoniacks let me *dub*
With the name of legion club. *Swift.*

A man of wealth is *dubbed* a man of worth;
Venus shall give him form, and Anstis birth.
Pope.

Women commence by Cupid's dart,
As a king hunting *dubs* a hart. *Cleaveland.*

A plain gentleman, of an ancient family, is of better quality than a new knight, though the reason of his *dubbing* was meritorious. *Collier on Pride.*

I have on the seat behind me the constitution of Mr. John Probert; a knight-errant, *dubbed* by the noble lord in the blue ribbon, and sent to search for revenues and adventures upon the mountains of Wales. *Burke.*

DU'BIOUS, *adj.*
DUBIO'SITY, *n. s.*
DU'BIOUSLY, *adv.*
DU'BIOUSNESS, *n. s.*
DU'BITABLE, *adj.*
DUBITA'TION, *n. s.*

Lat. *dubius*; anciently *duvius*, from *duo*, two, and *via*, a way; drawn two ways; in doubt. Doubtful; uncertain in argument or event; not plain. Dubitable is also doubtful, or that may be doubted.

Dubitation may be called a negative perception; that is, when I perceive that what I see is not what I would see. *Grew.*

Men often swallow falsities for truths, *dubiosities* for certainties, feasibilities for possibilities, and things impossible for possible. *Browne's Vulgar Errours.*

Authors write often *dubiously*, even in matters wherein is expected a strict definitive truth. *Id.*

Many of the ancients denied the antipodes; but the experience of our enlarged navigation can now assert them beyond all *dubitation*. *Id.*

No quick reply to *dubious* questions make.
Denham.

His utmost power with adverse power opposed,
In *dubious* battle, on the plains of heaven. *Milton.*

Satan with less toil, and now with ease
Wafts on the calmer wave, by *dubious* light. *Id.*

Yet where truth and knowledge are concerned in the case, I know not what fault it can be to desire the explication of words, whose sense seems *dubious*.
Locke.

She speaks with *dubiousness*, not with the certainty of a goddess. *Broome.*

Almanack-makers wander in generals, and talk *dubiously*, and leave to the reader the business of interpreting. *Swift.*

It is a common and just observation, that, when the meaning of any thing is *dubious*, one can no way better judge of the true intent of it, than by considering who is the author, what is his character in general, and his disposition in particular. *Pope.*

We also call it a *dubious* or doubtful proposition, when there are no arguments on either side.
Watts's Logick.

Now hope exalts the fisher's beating heart;
Now he turns pale, and fears his *dubious* art. *Gay.*

When a question of orthography is *dubious*, that practice has, in my opinion, a claim to preference, which preserves the greatest number of radical letters, or seems most to comply with the general custom of our language. *Johnson. Plan of Dictionary.*

In clay-formed beds the trickling streams collect,
Strain through white sands, through pebbly veins direct;
Or point in rifted rocks their *dubious* way,
And in each bubbling fountain rise to day. *Darwin.*

Where Reason's meteor-rays, with sickly glow,
O'er the dun gloom a dreadful glimmering throw;
Disclosing *dubious* to the' affrighted eye
O'erwhelming mountains tottering from on high,
Black billowy deeps in storms perpetual tossed,
And weary ways in wildering labyrinths lost. *Beattie.*

You'll find there are such shortly,
By its rich harvests, new disease, and gold;
From one-half of the world named a whole new one,
Because you know no better than the dull
And *dubious* notice of your eyes and ears. *Byron.*

DUBITZA, a town and fortress in Bosnia, European Turkey, situated on the right bank of the Unna, near its confluence with the Save; and opposite a fortified Austrian town of the same name in Croatia. The Austrians, in the campaign of 1788, twice attempted to take it by storm, and it at last surrendered; but, at the peace of Sistov, it was restored to the Porte. Population 6000. Twelve miles north-east of Kostainitza: the Austrian town has about 1600 inhabitants.

DUBLIN County, the metropolitan county of Ireland, lies on the east coast of that country, immediately opposed to the Welsh coast: it is between 53° 10′ and 53° 37′ N. lat., and 6° 36′ W. long. from Greenwich. The boundaries are, on the north the county of Meath, on the west parts of Kildare and Meath counties, on the south the county of Wicklow, and on the east the Irish sea. Its sea-front is terminated by the Nanny Water on the north, and by Bray River on the south.

This county contains 240,113 statute acres: seventy-three parishes and fourteen parts of parishes, with 693 townlands; and is divided into eight baronies and one half barony. The surface of that part north of the river Liffey is flat and badly supplied with water, on which account it is less inhabited by gentry but more applied to agriculture: the surface of the southern side is a beautiful inclined plane, ascending gradually from the sea-shore to the foot of the Dublin and Wicklow Mountains. The soil in this part is lighter than the rich loam in the northern baronies, but this disadvantage is not felt, as from the natural beauty of the country south of the Liffey it is almost wholly appropriated to the demesnes of the gentry of Dublin and to manure villas for the summer season.

The entire county may be considered as naturally divided into two parts, by a line drawn from the village of Newcastle to Rathfarnham, where it will form a very obtuse angle with its new direction, which may be represented by a line drawn from Rathfarnham to Booterstown, where the limestone crops out on the strand: all north of this line rests on a base of floetz limestone, except one patch extending from Skerries to Balbriggan, which rests on transition rocks. Fuel is scarce in the centre of the county, although there are coals at Naul and an extensive turf bog at Ganistown, but the coal vein is not worked. The northern baronies are still in a very wild and uncultivated state, although much benefited by the new Drogheda road by Ashbourne: a place hitherto almost unknown. The tract between the great western road near Rathcool, and the Blessington road, with the Golden Hill and Ballinscorney, rests on slaty rock. The remainder of the county, with little exception, is of granite formation; the field of granite commencing at Williamstown strand and extending to Brandon Hill in the county of Kilkenny, having an average breadth, in that distance, of eleven miles.

There are few good harbours on the coast of this county; piers have been constructed at Balbriggan, at Howth, &c., and an extensive asylum harbour at Kingstown, enclosing 226 acres by two piers of several kants, having a depth of twenty-six feet at low water. The Holyhead and Liverpool mail packets sail from this asylum, and it is in contemplation to connect it with the Ringsend docks by a ship canal, or else to convey merchandise hence to the city of Dublin by a rail-way: the distance is about six miles and a half. It was here that his majesty George IV. embarked in 1821, and a handsome obelisk, bearing an appropriate inscription, is erected on the spot, to commemorate the event. Kingstown harbour is too large, and the pier should have been faced with cut stone down to the foundation.

Dublin, the metropolis of Ireland, the second city in his majesty's dominions, is situated in the province of Leinster, and county of Dublin. The river Liffey, which falls into Dublin Bay, immediately below the custom-house, divides the city into two nearly equal parts. Dublin lies seventy-two miles west of Holyhead in Wales, 303 south-west of Edinburgh, and 420 north-west of London. Long. 6° 6′. W., lat. 53° 20′ N.

Dublin is a place of great antiquity; it was anciently confined to the south side of the Liffey. In the tenth century, after the fortifications of Dublin were repaired by the Ostmen, the walls of the city, including those of the castle, did not occupy more than an Irish mile; they extended from Wine-Tavern gate to Audeon's Arch, and were continued thence to Newgate, now Thomas-street; they were continued to Ormond's-gate, or, as it has been since called, Wormwood-gate; thence to the Whitworth-bridge, and along the banks of the river to Newman's Tower, nearly the present site of the south entrance of Essex-bridge; and, from Newman's Tower, in an oblique direction, to Dame's-gate, at the west end of Dame-street. From the gate at the south-west angle of the castle, the wall ran to Nicholas-gate, and was continued thence to Newgate. The principal streets without the walls were, on the west, New-row, Francis-street, Thomas-street, and James's-street; on the south, Patrick-street, Bride-street, and Ship-street; and on the east, Dame-street, George's-lane, and Stephen-street. That space of ground now occupied by Crane-lane, Temple-bar, Fleet-street, Lazar's-hill, or, as it is now

called, Townsend-street, Crampton, Aston's, George's, and Sir John Rogerson's quays, &c., was then overflowed by the Liffey. On the north side of the river there were only Church-street, Mary's-lane, Hammond-lane, and Pill-lane, then built but on one side as far as Mary's Abbey, which terminated the extent of that part of the town to the east. Grange-gorman, Stoney-batter, now called Manor-street, and Glassmanogue, were then villages at some distance from the city; and, at the latter, the sheriffs have held their courts in times of the plague. In 1664 the inhabitants amounted to 2565 men, and 2986 women, Protestants; and 1252 men, and 1406 women, Roman Catholics: in all 8159.

Ptolemy, who flourished about A. D. 140, says, it was anciently called Aschcled. In 155 Alpinus, whose daughter, Auliana, was drowned in the Liffey, changed the name from Aschcled to Auliana. It was afterwards named Dublana, and Ptolemy calls it Eblana. Dublana, whence Dublinum and Dublin, is evidently derived from Dub-leana, the place of the black harbour or lake, or rather the lake of the sea; the Bay of Dublin being frequently so called. The city has had a variety of names. The Irish call it Drom-choll-coil, 'the brow of a hazel wood.' In 181 Eogan, king of Munster, being on a royal tour, paid a visit to this place, which was then called Atha Cliath Dubb-Line, 'the passage of the ford of hurdles over the black pool.' The harbour of Dublin was likewise known by the name of Lean-Cliath, or Leam-Cliath, from Lean or Leam, a harbour; and from Cliath or Cliabb, which literally signifies a hurdle or any thing made of wicker-work; it also signified certain wires formed with hurdles, and placed in rivers and bays by the ancient Irish, for the purpose of taking fish; whence any river or bay, wherein these wires were fixed, had the name of Cliath or Cliabb annexed to it, to signify the establishment of a fishery. Dublin, therefore, being originally built on or near one of these harbours, was anciently called Baly-lean-Cliath; that is, the town on the fishing harbour. It is still distinguished in the Irish language by the appellations of Ath-Cliath, 'the ford of hurdles,' and Ballyath-Cliath, 'the town of the ford of hurdles,' the inhabitants having formerly had access to the city, over the river, by hurdles laid on the low marshy grounds adjoining the water; and this name was also extended to the north side of the river, from a temporary bridge of hurdles thrown over the Anna-Liffey, a corruption of Auin Louiffa, or the swift river, so termed from the rapidity of the mountain floods. The north side was enlarged by Mac-Turkill, the Danish prince; who, notwithstanding, fixed his residence on the south side, and abandoned the northern town; which, from the original country of the invaders, was called Eastmantown, then Ostmentown, since corrupted to Oxmantown. King Edgar, in the preface to his charter, dated 964, mentions Ireland, with its most noble city (nobilissima civitas) of Dublin. By the Fingalians, it is called Divelin, and by the Welsh Dinas Dulin, or the city of Dulin.

In 448 Alpin M'Eachard, king of Dublin, and all his subjects, are said to have been converted to Christianity by St. Patrick. In 498 the Ostmen, or Danes, having entered the Liffey, with a fleet of sixty sail, made themselves masters of Dublin and the adjacent country, and soon after environed the city with walls. About 1170 Dermod M'Murrough, king of Leinster, having quarrelled with the other princes of the kingdom, a confederacy was formed against him by Roderic O'Connor, monarch of Ireland. Dermod applied to Henry II., king of England, who sent over a number of English adventurers, by whose assistance he was reinstated in his dominions; in 1171 the descendants of the Danes still continuing to hold possession of Dublin, it was besieged and taken by a powerful party of the English, under Raymond-Le-Gros. M'Turkill, the Danish king, escaped to his shipping; but returned soon after, with a strong fleet, to recover the city; he was killed in the attempt, and in him ended the race of Easterling princes in Ireland. In 1172 Henry II. landed at Waterford, and obtained from Richard, earl Strongbow, who married Eva, the daughter of M'Murrough, and by compact was his successor, a surrender of the city of Dublin; where he built a pavilion of wicker-work near St. Andrew's church, then situated where Castlemarket lately stood, and there entertained several Irish princes, who voluntarily submitted to him, on condition of being governed by the same laws as the people of England. Henry also held a parliament here. In 1173 he granted his first charter to Dublin, and by divers privileges encouraged a colony from Bristol to settle in it. In 1210 upwards of twenty Irish princes swore allegiance to king John at Dublin; engaging to establish the English laws and customs in the kingdom; and in the same year courts of judicature were instituted. In 1216 Magna Charta was granted to the Irish by Henry III., an entry of which was made in the red book of the exchequer at Dublin. In 1217 the city was granted to the citizens, in fee-farm, at 209 marks per annum; and, in 1227 Henry ordained, that the charter granted by king John should be kept inviolably. In 1404 the statutes of Kilkenny and Dublin were confirmed in a parliament, held at the city, under the earl of Ormond. The charter of the city of Dublin was renewed in 1609 by James I. The civil government of the city was anciently under the management of a provost and bailiffs; in 1308 John le Decer was appointed the first provost, Richard de St. Olave and John Stakebold bailiffs. In 1409 the title of the chief magistrate was changed to that of mayor, when Thomas Cussac was appointed to the office, Richard Bove and Thomas Shortall being bailiffs; the office of bailiffs was changed to sheriffs in 1547. In 1660 Charles II. gave a collar of SS. and a company of foot-guards to the mayor; and in 1665 he conferred the title of lord mayor on the chief magistrate, to whom he also granted £500 per annum, in lieu of the foot company. Sir Daniel Bellingham was the first lord mayor of Dublin; Charles Lovet and John Quelsh were sheriffs the same year. In 1672 Arthur, earl of Essex, introduced new rules for the better government of the city; and in 1683 the old Tholsel was built by Inigo

Jones, for the magistrates to hold their courts, assemblies, &c.

The hospital for lying-in women, founded by Dr. Bartholomew Mosse, and opened in 1757, stands on the north side of Great Britain-street. The building, designed by Cassels, is light and elegant; a beautiful steeple rises in the centre, and the wings are formed by semicircular colonnades on each side. Adjoining the east colonnade is the rotunda, where balls and assemblies are held, and concerts performed for the benefit of the charity. The blue-coat hospital was founded on the west side of Queen-street, by Charles II., in 1670, for educating the children of reduced freemen of the city; but the original building being greatly decayed, was taken down, and the new blue-coat hospital, situated on Oxmantown-green, was begun in 1773. The front is enriched by four three-quarter Ionic columns, supporting a pediment in the centre, over which the steeple rises, embellished with Corinthian and composite columns in an admired taste. Connected with the front by circular walls, ornamented with balustrades and niches, are the school on one side and the church on the other, which form two well-proportioned wings, each crowned with a small turret; the steeple is not yet finished. The royal hospital at Kilmainham, for the support of invalids of the Irish army, was founded by king Charles II., on a plan similar to that of Chelsea. It was completed in 1683, and cost upwards of £23,500. It is situated at the west end of the town, on a rising ground, near the south side of the river, from whence there is an easy ascent to it through a handsome avenue and park. It is of a quadrangular form, enclosing a spacious area, laid out in grass-plots and gravelled walks; an arcade is carried along the lower story in each square, to the entrance of the hall and chapel, which are both curiously decorated; in the former are several whole length portraits of royal personages, and other distinguished characters. Madam Steven's hospital, the foundation of which was laid in 1720, is a quadrangular building, pleasantly situated on the banks of the river, near the west end of James's-street; the hospital for lunatics, in Bow-lane, founded by Dean Swift, and opened in 1757; Sir Patrick Dun's hospital, in which the royal college of physicians hold their meetings and examinations; the Cork-street fever hospital; the new Meath hospital, built by Mr. Pleasants; Mercer's hospital, in Johnson's-place, founded by the amiable Mrs. Mercer; Simpson's hospital, in Great Britain-street, an asylum for blind and gouty men; the house of industry, in Brunswick-street, for the aged and infirm; the hospital for incurables, on the Donnybrook-road; and the charitable infirmary, Jervis-street, are the most conspicuous in alleviating the afflictions of disease, and ministering to the numerous calls of the impoverished. There are several noble institutions also, that derive aid, either wholly, or in part, from parliament; such are the Hibernian school, in Phœnix park, for the education of the children of soldiers, and the Royal Marine school, for the maintenance and education of the children of distressed sailors.

Dublin is seated in view of the sea on the east, and a fine country which swells into gently rising eminences on the north and west, while it towers boldly up in lofty mountains, that bound the horizon, on the south. The city itself cannot be seen to full advantage on entering the harbour; but the approach to it exhibits a fine prospect of the country for improvement and cultivation, interspersed with numerous villas, that enliven this delightful scene, which, beginning at the water's edge, is continued all over the coast to the north of the bay, as far as the eye can reach, and is finely contrasted by a distant view of the Wicklow mountains on the south, where the conical hills, called the Sugar Loaves, contribute not a little, by the singularity of their appearance, to embellish the landscape, so extensive and picturesque as not on be equalled by any natural scenery in Europe, except the entrance of the Bay of Naples, to which it bears a striking resemblance.

The form of Dublin is rectangular. From the royal hospital at Kilmainham, at the western extremity of the town, to the east end of Townsend-street, the length is two miles and a half, and its greatest breadth two, and it is about nine miles in circumference. It contains about 16,000 houses, whose inhabitants are estimated at 180,000.

The civil government of Dublin is executed by a lord mayor, recorder, two sheriffs, twenty-four aldermen, and a common-council composed of representatives from the twenty-five guilds. Dublin, being the seat of government, and of the chief courts of justice, has received many charters and ample privileges from the kings of England, since the reign of Henry II. Richard II. erected it into a marquisate in favor of Robert de Vere, earl of Oxford, whom he also created duke of Ireland. It is an archiepiscopal see, and sends two members to parliament.

Dublin is remarkable for the breadth and elegance of its leading streets; from the Canal-bridge, in Baggot-street, along the north side of Stephen's-green, or by Merrion-square into Grafton-street and College-green, thence through Westmoreland-street, Sackville-street, Rutland-square, Gardiner's-row, and so to Mountjoy-square, is probably the most elegant succession of city avenues to be seen in any European capital; but the back streets are a melancholy contrast, very few of them presenting the appearance either of wealth or comfort. There are five handsome squares in the city, the largest of which, called Stephen's-green, is one mile in circumference, enclosed by iron-railing, mounted on a dwarf wall, outside of which is a broad gravel-walk, protected from the carriage-way by chains and pillars. In the centre of this great level space, stands a fine equestrian statue, by Van Nort, of king George II. Merrion-square is a large rectangle, surrounded by noble mansions; those on the north side enriched, in the basement story, by rustic work in stone; these were built from the designs of John Ensor, esq., who laid out this fine square. Rutland-square is the Grosvenor-square of Dublin; a few of the Irish nobility still retain their mansions here, the noblest of which is Charlemont-

louse. Considerable improvements are still rrying on in the avenues of Dublin, under the irection of the Wide-street commissioners, parcularly in the vicinity of St. Patrick's cathedral, ecidedly the most miserable part of the city or s liberties.

Dublin is divided into four districts, each subitted to the care and protection of a police iagistracy, who have an office and court within ieir respective districts. The head office of olice is in the Castle division; to this belong irty-one peace-officers, and to each of the other, ven. Police stations are established at conveient distances round the city, and a patrol of orse-police is in constant motion during the eater part of each night, even to a distance of ven miles from the city. The old archiepisopal palace has been converted into the horserrack of the police corps.

The public buildings of Dublin are both nuerous and noble: the most architectural is the ank of Ireland (formerly the Parliament House) e foundation of which was laid in 1729; it was ected under the instruction of Sir Edward ovet Pearce, after a design by Mr. Cassels. he original building consisted of a grand colonade of the Ionic order, forming three sides of a ctangular court-yard. The central colonnade connected with the two noble porticos, forming e east and west fronts, by circular curtain walls, rnamented with three-quarter columns. These st-mentioned porticos are built from the designs f Messrs. Gandon and Parke. No part of the nterior remains as formerly, except the corridors nd the House of Lords, in the last of which is fine statue of George III. by Bacon jun. The ish office stands on the site of the old House f Commons, and is a very spacious, light and eautiful apartment. The establishment for enraving and printing of bank notes, under the irection of Mr. Oldham, exhibits a singular pecimen of ingenious mechanism; it was visited y his present Majesty during his stay in Ireland 1 1821. The General Post Office, established 1 1784, stands in Sackvi.le Street at the intersecon of four leading streets and adjacent to Nelon's pillar. The portico in front, of Portland one, is a remarkably beautiful piece of archicture: the ornaments of the frieze are not xceeded by any similar designs in the city. This ery large and convenient building was raised r the comparatively moderate sum of £50,000 om the design of Francis Johnston Esq. The tamp Office, in William Street, is also a fine uilding of cut granite stone raised in the Wickw Mountains.

The Castle of Dublin, now the town residence f the lord-lieutenants who formerly lodged at the oyal Hospital of Kilmainham, may be consiered as divided into two parts, called the upper nd lower yards. The upper is a quadrangle of rick buildings, with ornamental stone archiaves to the windows; the entrance to his excelncy's apartments is by a fine colonnade, antehall and grand flight of steps; opposite to the ate entrance is a handsome building, containing ne apartments of the guard of honor and of everal of the household; the basement is an rcade supporting an open colonnade surmounted by a pediment, above which rises an octagonal tower crowned by a tapering dome. This pretty building is terminated as wings, by two lofty archways of rustic-work, on the crowns of which rest statues of Justice and Fortitude. The Castle was built by Henry de Londres, archbishop of Dublin in 1220, but not used as the vice-regal residence until the year 1560, by command of queen Elizabeth, since which time it has received so many additions that it does not present the appearance of any regular edifice, but an assemblage of irregular buildings raised for some immediate necessity. In the state apartments there is a fine room, eighty-two feet in length, called St. Patrick's Hall, having the ceiling ornamented by three characteristic paintings of Waldre's. Here the knights of the noble order of St. Patrick were regaled after their original institution, and here, by annual balls, the birth-day of the great patron saint of Ireland is celebrated. The lower Castle yard contains several offices, the Old Treasury, the ordnance office, &c., beside the very beautiful chapel lately erected after a design by Francis Johnston Esq. the very best specimen of modern pointed architecture in the city. It is built of cut stone, highly enriched with carved heads and Gothic pinnacles. Nor does the interior lose any of that masterly style so conspicuous in the exterior. The regal seat and front pannels of all the pews are adorned with armorial bearings in carved oak of a series of viceroys; the great window embellished with stained glass, and the ceiling decorated with highly enriched pendants. The first stone of the chapel was laid by his grace John duke of Bedford, in 1807, and the expense of its erection was about £40,000. The Record Tower, adjoining the chapel, was erected by king John, its walls are fourteen feet thick: here James II. established a mint and secreted a quantity of the royal plate. Birmingham Tower, another of the flankers of the town wall, stands at a little distance from the record tower. The old building of this name having been destroyed by fire, the present unmeaning mass was erected in its stead.

The Royal Exchange contiguous to the castle, is a magnificent pile, erected after a design of Mr. Cooley; the ground plan is simply a circle inscribed in a square. It is wholly built of Portland-stone, has three fronts adorned with pillars and pilasters, and contains a noble area within, lighted by a beautiful and spacious dome, for the transaction of commercial business. In the circular ambulatory, fronting the principal entrance door, stands a handsome statue of his late majesty in Roman military costume designed by Van Nort. Besides the royal exchange, which is now almost disused for commercial purposes, there are two other handsome buildings faced with stone appropriated to the accomodation of merchants, the commercial buildings in College Green and the corn exchange on Burgh Quay, in the former of which the chamber of commerce hold their meetings. The Custom House is acknowledged to be one of the noblest buildings in the city; its south front towards the river is built of Portland stone, extends 375 feet, and is adorned with a beautiful portico in the centre, consisting of

four Doric columns supporting an enriched entablature and pediment, the tympanum of the latter decorated with a group of figures in alto relievo, representing Hibernia and Britannia presenting emblems of peace and liberty. A magnificent dome supporting a cupola, on whose apex stands a colossal figure of Hope, rises nobly from the centre of the building to a height of 125 feet. The north front is of equal extent; but, the ornamented parts excepted, is entirely of granite stone, which produces rather a sombre effect. The only handsome apartments within for public use are the Board room, and what is called the Long room. To the custom house are attached large and well designed docks, much too capacious and of too expensive a character for the trade of Dublin. The old dock, which is quite sufficient for the present trade, is 400 feet in length by 200 in breadth; the second dock measures 330 feet by 250, and the third or inner basin is 650 in length by 300 in breadth. Extensive stores have also been erected: the tobacco store is 500 feet long, its breadth being 160. Besides these docks which belong to government, and are leased for about £7000 per annum to private individuals, there are canal docks on both sides of the river which alone would afford abundant accommodation to all the shipping engaged in the Dublin trade; these, of course, are quite unemployed. These seven great basins are faced with limestone of the very best description and in a workmanlike style. The linen hall is a very extensive range of building, not uninteresting in external appearance: a handsome statue of his present majesty has lately been erected there by the trustees; it was executed by Kirk. A most useful building has lately been erected, to be called the National Mart, or Usher's Quay, the object of which is to encourage the small capitalist, who is here to be supplied, not only with an immediate sale for the produce of his labor, but also with a loan, to enable him to bring something more valuable to market as a second venture.

There are two noble buildings appropriated to the accomodation of the legal profession, and to the administration of justice. The principal is the stately edifice called the Four Courts, or Inn's Quay: the first stone was laid in March 1786, by his grace the duke of Rutland, but the whole structure was not completed for fourteen years after. The design which is by Cooley, but executed by Gandor, is truly noble. It consists of a grand central building, with squares on each side, enclosed by ranges of lofty buildings, containing the different offices of records, &c. The front of the centre is adorned with an elegant picture of six Corinthian columns, supporting a frieze and pediment; on the apex of the latter stands a statue of Moses, and at each extremity are allegorical figures of Justice and Mercy. Behind the pediment and statues rises a circular lantern, sixty-four feet in diameter, crowned by a lofty dome. The spacious court yards on each side are enclosed in front by light and beautiful open arcades, in the centre of which are great coach ways, ornamented by groups of allegorical emblems. The four law courts are contained in the central buildings, radiating from a spacious circular hall of sixty-four feet diameter: they are all of equal dimensions, rather small, but lofty and well lighted. The rolls court is also in the same building. The extent of the grand front of the four courts, presented to the quays, is 450 feet, and its depth 170. It is built of cut granite, the ornamental parts being of Portland stone: the expense is estimated at £200,000.

The inns of court, at the upper end of Henrietta Street, occupy a beautiful and singularly original building, designed by Mr. Gandon. The front is hewn of granite, the ornamental parts being of Portland stone. The plan consists of a centre and wings, each of the latter being crowned with noble pediments. In the central compartment of the three great subdivisions of the front, beautiful panels are inserted, filled with allegorical representations in alto-relievo; the central of which represents the judicial authorities of Ireland, receiving from queen Elizabeth a translation of the Bible and a charter of incorporation. The door-ways of the wings are ornamented by caryatides, the only specimen of this description of sculpture in Dublin. In one of the wings is the dining hall of the benchers and students of the inns; and in the other are the Prerogative Court and Consistorial Office, &c. A law library is now (1827) erecting, with a front of cut stone, adjacent to the back entrance to the inns on the site of the primate's old city palace. There are other courts in Dublin and its vicinity. The city court-house, or Sessions House, adjacent to Newgate, is an uninteresting building, and rather badly adapted to the purpose of its erection. The Court of Conscience, in Coppinger's Row, where the ex-lord mayor, or his substitute, presides, is held in a miserable apartment in the basement story of the City Assembly Room: besides four Manor Courts, only one of which has a suitable court house; and the Insolvent Court, held in a very humble description of building.

The ecclesiastical division of Dublin is into nineteen parishes, to each of which a church is attached. There are also the cathedral of St. Patrick, Christ Church, which is only collegiate though called metropolitical; seven assistant chapels to the parish church of St. Peter, besides many private chapels, which are independent of the diocesan, such as those of Kilmainham Hospital; the Foundling Hospital; the Lying-in Hospital; the Blue-coat Hospital; the Marine School; Hiberman School, &c. The Roman Catholic division of parishes does not correspond with that of the established church; but their places of worship are numerous, and the chapels in Anne Street and Exchange Street possessed of much architectural elegance. The Metropolitan Chapel in Marlborough Street, when finished, will be a great ornament to the city. The great aisle is 150 feet in length, and 120 in breadth; the exterior is still in a very unfinished state. The Quakers, Moravians, Methodists, &c., have meeting houses in various parts of the city: the number of Methodists' meeting houses is not increasing; on the contrary one of them has been purchased for a free church, for the Protestant poor; and proposals have been made for the purchase of a second.

The cathedral of St. Patrick is a venerable pile, originally possessing much grace, beauty, and lightness of style. The ground plan is a single cross with four side aisles: the nave, 150 feet in length, is adorned with several fine monuments. Here is the simple slab, inscribed with an epitaph written by himself, consecrated to the memory of Swift; and an adjacent column supports an equally plain tablet, with an insciption, also from the pen of dean Swift, to Stella. The monuments of Dr. Marsh, the founder of the public library, called after his name, and Dr. Smyth, the endower of the Bethesda, are the most rich and beautiful designs. The south transept has lately been refitted, and in levelling the floor some curiously figured tiles, forming the steps of an ancient altar, were discovered, which, together with the remains of the altar, are left uncovered for the gratification of the public taste in matters of antiquity. The northern transept, lately rebuilt, is used as the parish church of St. Nicholas without. The choir of St. Patrick's is strikingly picturesque; it is lighted by five lancet-shaped windows at the summit of the eastern wall, which shed an indefinite and partial light upon the various objects beneath. The organ is large and fine toned: the echo of the chancel most grateful to the ear. The walls and panelled gallery fronts decorated with the helmets, swords, and banners of the knights of St. Patrick; and the oaken canopied stalls adorned with their armorial bearings, emblazoned in golden characters. Near the communion table is the monument of the great earl of Cork; opposite is a tablet to duke Schomberg; while, amongst the fantastic relics of the place, are preserved the skull of the duke, perforated by a musket ball, and the chain ball by which lord Loften was slain at the siege of Limerick. St. Patrick's Cathedral was built in 1190, upon the site of a church said to have been founded by St. Patrick himself. The steeple was added in 1370, and the spire in 1749; the ball of which is 223 feet from the level of the street. The collegiate church of the Holy Trinity, called also Christ Church, is said to have been built in 1038, by Litricus, the son of Amlane, an Ostman king of Dublin. Its site had been appropriated to sacred purposes by St. Patrick, who is said to have preached to the heathen in the precise vaults on which this ancient edifice stands, these being the stores used by the Danes for lodging merchandise. The original building was destroyed almost wholly by fire, and, with the exception of a fine Norman door-way in John's Lane, little either of the ancient architecture, or of any intelligible design, is discoverable in the present mutilated structure of Christ Church. In this church the reformed service was first read in Ireland; and here also Lambert Simnell was crowned by the title of Edward VI. St. Andrew's Church still exhibits some few traces of Norman architecture, and is worth the attention of the antiquarian. Several of the other parish churches are well designed, and executed in a masterly style: St. Werburgh's, Thomas's, and Catherine's, are not unlike each other in internal arrangements, and are all spacious and venerable. St. Werburgh's had once a handsome spire, which the parishioners removed, from an apprehension that the foundation was sinking. St. Paul's, lately erected, has a low and clumsy spire; St. George's possesses not only a grateful and delicate spire, but also a beautiful Grecian portico, supporting a frieze and pediment; the elevation resembles that of St. Martin's, in London, but is probably less heavy, owing to the omission of the Græco-Italian block ornaments of the latter. The parishioners of St. Michan's are about to rebuild their church, the present being decayed to a perilous extent: underneath the old church are the vaults remarkable for their antiseptic power; bodies deposited here 120 years ago are found as perfectly preserved this moment as if they had undergone the process of embalming.

Amongst the useful institutions of Dublin are,—the Royal Dublin Society, for the encouragement of husbandry and the arts, established in 1731: here public lectures are delivered by the society's professors, in geology, mineralogy, botany, and chemistry: and free-schools are opened for instruction in drawing and sculpture. The Society occupy the noble mansion of the dukes of Leinster, built from Cassel's designs, and perhaps one of the noblest private residences in Europe;—the Royal Hibernian Academy, for the advancement of the arts, built at the sole expense of Francis Johnston, Esq., now president, who bestowed it upon the artists of Ireland, to whom his present majesty had most graciously granted a charter of incorporation (the first exhibition of the Royal Hibernian Academy took place in 1826);—and the Royal Irish Academy situated in Grafton Street, whose Transactions contain many valuable articles; in the library are several valuable MSS. The principal public libraries in Dublin are, those of the college; the Dublin Society, rich in botanical works; the Dublin Library Society, in D'Olier Street; and Marsh's Library, in Kevin Street. Since the erection of the Royal Hibernian Academy, the committee of the Irish Institution have felt themselves called upon to contribute their aid to the advancement of the arts in Ireland, and they are now erecting a handsome gallery in College Street, for the exhibition of the works of the old masters, a situation both central and convenient.

Trinity College was founded by queen Elizabeth, and endowed with many valuable livings by James I. The foundation was laid in 1591, and students were admitted in 1593. By the original charter, the corporation consisted of the provost, three fellows, and three scholars; but it is now enlarged to seven senior fellows, eighteen juniors, and seventy scholars, besides the provost: each of the junior fellows having nearly 100 private pupils to instruct, independent of the delivery of occasional public lectures. The independent members are divided into an equal number of classes, called fellow-commoners, pensioners, and sizars. The provost, fellows, and scholars, return the member for the university, and the provost and senior fellows alone transact all the 'negotia collegii.' A senior fellowship is supposed to be worth about £1500 per annum. There is a limit placed to the number of pupils permitted to enter under a junior fellow in each class, viz. thirty-six; but this limit is so great

that 144 may thus be entrusted to one lecturer to instruct in the short periods of each year called terms. The scholars have the privilege of voting for a representative to parliament; commons for five years (the duration of a scholarship); chambers at half fire and rent, and £4 per annum. They are also eligible to chapel masterships, and assistant librarianships; but these places are few in number, and neither valuable nor permanent. The independent members merely receive instruction, for which they pay their tutors, the fellow-commoners sixteen guineas, the pensioner eight guineas, per annum (the sizars are exempt from charges), besides some small annual fees. The first class graduate after three years and a half, the second and third not until the expiration of four years. During the collegiate course quarterly examinations are held in the theatre, at a certain number of which every student is obliged to answer in the prescribed course, from which it follows that in this college no pupil can possibly graduate without having obtained a certain quantity of information, while the most distinguished are rewarded by the collegiate honors of premiums and certificates. The number of names on the college books is at present (1827) nearly 2000.

The buildings of Dublin College are numerous and elegant. The grand front, presented to College Green, is entirely of cut granite, the ornamental parts being of Portland stone. It measures 300 feet in length, is enriched by a centre beautifully relieved by four noble three-quarter Corinthian columns supporting a pediment, and terminated by two lofty pavilions, surmounted by balustrades, and adorned with graceful coupled pilasters. Within are three large squares, and one smaller, called formerly the quadrangle. The Parliament Square, 316 feet long by 212 in breadth, is enclosed by lofty buildings (four stories in height) of cut stone, terminated by the beautiful porticoes of the chapel and theatre, which correspond while they oppose. The quadrangle contains the dining hall, vice-provost's residence, and a corresponding building (fellows' chambers) beyond the quadrangle in the Library Square, 265 feet in length by 214 in breadth, enclosed on three sides by ancient brick buildings, chiefly inhabited by the students, but, on the fourth, by the college library, the noblest apartment in the city of Dublin. To the north of the Library Square is that usually called Botany Bay, somewhat larger than any of the others, and surrounded by lofty buildings. The College Park, containing about twenty acres, is planted with noble elms. Here are the New Anatomy House, and the Printing House, a beautiful little Doric building. The chapel and theatre have similarly beautiful fronts of Portland stone, consisting of porticoes of four Corinthian pillars supporting a pediment; behind the porticoes, arcades open into a vestibule on each side, and in the centre of which are the entrances to the great hall and chapel. The hall contains an admired monument to provost Baldwin, and several fine portraits of eminent persons, former students, amongst whom are Swift and Burke. The dimensions of the chapel are equal, but the internal arrangement necessarily different from those of the theatre. The dining hall is a singular design, the front, of cut stone, is adorned with coupled pilasters, and a shallow pediment; the great door opens on a broad terrace, approached by a flight of steps the entire breadth of the building: over the ante-hall, leading to the refectory, is the apartment in which the Historical Society hold their meetings. The library is an unpicturesque, though stately edifice: it is perforated by so many windows, that it defied the efforts of the artist to consult beauty of elevation. The chief library room (where his majesty Geo. IV. was received by the corporation) measures 210 feet in length by forty-one in breadth, is beautifully adorned with carved oak pilasters, and an indented frieze; while many fine busts of celebrated persons, standing on tapering pedestals, are ranged along either side: the inner, called also the Fagel Library, is fifty-two feet long, and contains the collection of a Dutch family, whose name it bears, of about 20,000 volumes. The manuscript room is over the Fagel Library: here are Persian and Arabic MSS., an autograph of king James II., and a most valuable collection of unpublished MSS. on Irish history and antiquities; to the south of the library is the master's garden, being a continuation of the pleasure ground attached to the provost's house: this latter mentioned building is a very beautiful structure, built entirely of cut stone, from a design by lord Burlington. The College Museum does not contain many things of interest: there is here a curious model, by Mr. Bald, of the surface of the county of Mayo. The College Observatory is situated at Dunswick, three miles from the city, and the Botanic Garden at Beggar's Bush, about half a mile from College Green.

The College of Surgeons was endowed with a charter in 1784; the first licentiate was Thomas Wright, author of some valuable works on anatomy. It is a handsome building of cut stone; consisting of a rusticated basement story, surmounted by a handsome façade, adorned with three-quarter columns, separated by large circular-headed windows: the present elevation is an improvement by Mr. Murray: it stands in a commanding position in Stephen's Green, at the corner of York Street. The School of Anatomy here is highly valued, and much visited by surgical students from England and Wales. The College of Physicians hold their meetings in Sir Patrick Dunn's Hospital, a noble building in Canal Street, erected at the expense of the munificent testator whose name it bears. There are several private schools of anatomy in Dublin, in Park Street, Brunswick Street, &c., also well attended by students from various parts of Great Britain. Dublin possesses numerous classical schools, conducted by distinguished scholars of its university.

The river Liffey, which divides the city, is enclosed by magnificent walls of cut stone, from Ringsend to Bloody Bridge, a distance of about two miles, in which length it is crossed by seven noble bridges, six of cut stone, and one of cast iron: an additional bridge of cast iron is about to be thrown across the river, near the entrance of the Phœnix Park, and above the Royal Barracks; and a magnificent arch spans the river,

about one mile west of Bloody Bridge, called Sarah's Bridge.

Dublin is encompassed by a circular road, and enclosed between two canals of noble breadth; these canals terminate in docks, communicating with the Liffey, capable of accomodating all the shipping that visits Dublin river, and of harbouring all the boats from the interior, which could be employed in transmitting the inland produce to this harbour for exportation: it is very probable that most of the export trade of Ireland will yet be carried on, by means of these canals, at Dublin.

The population of Dublin has increased but little in the last twenty years, and the number of houses has rather diminished.

DUBNO, a town of Volhynia, European Russia, on the river Irwa. The great annual market of Poland, called the Contract, was for some time held here. The population was then more considerable; at present it is not above 6600. Great numbers of Jews reside here, who carry on an extensive trade in wood, cattle, and raw produce, brought from Podolia, the Ukraine, Moldavia, &c. East of the town stands a castle, twenty-four miles S. S. E. of Lucko.

DUBOS (John Baptist), a learned and ingenious French author, born at Beauvais in 1670. He finished his studies at Paris, and was intrusted with the management of several important affairs in Italy, England, and Holland. At his return to Paris, he obtained a prebendary; he afterwards had a pension of 2000 livres, and the abbey of Notre Dame at Ressons, near Beauvais. He died at Paris, when perpetual secretary of the French Academy, on the 23d March 1742. His principal works are, 1. Critical Reflections on Poetry and Painting, 3 vols. 12mo. 2. A Critical History of the French Monarchy in Gaul, 2 vols. 4to.

DUCAL, *adj.* From duke. Pertaining to a duke: as a ducal coronet.

BERTUCCIO FALIERO. *(reading.)* Decreed
In council, without one dissenting voice,
That Michel Steno, by his own confession,
Guilty on the last night of Carnival
Of having graven on the *ducal* chair
The following words—— *Byron.*

DUCALS, letters patent granted by the ci-devant senate of Venice, or written in the name of the senate, to foreign princes: so named because the name of the doge or duke was prefixed to them.

DUCAREL (Andrew Coltee), an eminent archæologist, was born at Caen in Normandy in 1713; but his father, removing to England, placed him at Eton, and afterwards at Oxford, where he took the degree of doctor of civil law. He became a member of Doctors' Commons, in 1743, and in 1755 was elected commissary, or official of the jurisdiction of the collegiate church of St. Catherine, near the Tower. In 1757 he was appointed librarian of the palace of Lambeth; and the following year became commissary of the diocese of Canterbury. He was one of the first fellows of the society of Antiquaries. In 1762 he was elected F. R. S.; and appointed in 1763, together with Sir Joseph Ayloffe and Mr. Astle, to methodise the records in the State Paper office at Whitehall, and in the Augmentation office. Dr. Ducarel died at his house in South Lambeth, in May 1785. His principal works are, Anglo-Norman Antiquities, 1767, folio; a series of above 200 Anglo-Gallic, or Norman and Aquitaine Coins of the ancient Kings of England, &c., 1757, 4to.; the History and Antiquities of the Archiepiscopal Palace at Lambeth, 4to.; and the History of the Royal Hospital and Collegiate Church of St. Catherine, 4to.

DUCAS (Michael), a Greek historian who wrote a history of the empire, from the elder Andronicus to its termination. Though his style is barbarous, he relates facts not elsewhere to be found, and was an attentive observer of what passed. Nothing is known of his life except that he was often engaged in diplomatic employments. His works were printed at the Louvre in 1649, folio; accompanied with a Latin version and notes. This was afterwards translated into French by Cousin, of whose History of Constantinople, printed at Paris, 1672, 4to., and at the Hague, in 1685, 12mo., it concludes the eighth volume.

DUCAT, *n. s.* } From duke. Coins struck
DUCATOON', *n. s.* } by dukes. See COINS.

I cannot instantly raise up the gross
Of full three thousand *ducats.* *Shakspeare.*

There was one that died in debt: it was reported, where his creditors were, that he was dead: one said, he hath carried five hundred *ducats* of mine into the other world. *Bacon.*

An ounce of silver, whether in pence, groats, or crown pieces, stivers, or *ducatoons*, or in bullion, is, and eternally will be, of equal value to any other ounce of silver. *Locke.*

DUCAT. See COINS. The origin of ducats is assigned by Procopius to Longinus, governor of Italy; who, revolting against the emperor Justin II., made himself duke of Ravenna, and called himself Exarcha, i. e. without lord or ruler; and, to show his independence, struck pieces of money, of very pure gold, in his own name, and with his own stamp, which were called ducati. After him, the first who struck ducats were the Venetians, who called them zechini or sequins, from Zecca, the place where they first were struck. This was about A. D. 1280, in the time of John Danduli: but we have pretty good evidence, that Roger, king of Sicily, coined ducats as early as 1240. And Du Cange affirms, that the first ducats were struck in the duchy of Apulia. The chief gold ducats are, the single and double ones of Venice, Florence, Genoa, Germany, Hungary, Poland, Sweden, Denmark, Flanders, Holland, and Zurich. The double ducats weigh from five pennyweights seventeen grains, to five pennyweights ten grains; and the single in proportion. The Spaniards have no ducats of gold; and the silver one, with them, is no real species, but only a money of account like our pound. It is equivalent to eleven rials. The silver ducats of Florence serve there for crowns.

DUCATOON, a silver coin, struck chiefly in Italy; particularly in Milan, Venice, Florence, Genoa, Lucca, Mantua, and Parma: though there are also Dutch and Flemish ducatoons. See COINS.

DUCE Creek, called also Cross Roads and Salisbury, a town of the United States, America, in the state of Delaware, standing on Duce Creek, which runs into Delaware Bay. It is a celebrated wheat market, and has a flourishing trade with Philadelphia.

DUCENARIUS, Δεκεναριος, in antiquity, an officer of the Roman army, who had the command of 200 men. The emperors had also ducenarii among the procurators or intendants, called procuratores ducenarii. Some say that these had salaries of 200 sesterces; as in the games of the circus, horses hired for 200 sesterces were called ducenarii. Others hold, that ducenarii were those who levied the 200dth penny, the officers appointed to inspect the raising of that tribute. In the inscription at Palmyra, the word occurs very often.

DUCK, *n. s.*, *v. a.*, *v. n.* & *adj* | Duck'er, *n. s.* | Duck'ing-stool, | Duck'legged, *adj.* | Duck'ling, *n. s.* | Duck'weed, From Dut. *ducken*; Swed. *dyka*; Teut. and Welsh *tuck*; to dip or dive; from Goth. *doggwa*, water. A bird of the anas genus; a term of endearment; and, from the common habits of the duck, a stone made to dip in and out of the water in throwing: to dive as a duck, hence to bow; and, as an active verb, to put under water.

The varlet saw, when to the flood he came,
How without stop or stay he fiercely leapt;
And deep himself he *ducked* in the same,
That in the lake his lofty crest was steept.
Faerie Queene.

Let the labouring bark climb hills of seas
Olympus high, and *duck* again as low
As hell 's from heaven. *Shakspeare. Othello.*

The learned pate
Ducks to the golden fool. *Id. Timon.*

Will you buy any tape or lace for your cap,
My dainty *duck*, my dear-a? *Id. Winter's Tale.*

That we call *duckweed* hath a leaf no bigger than a thyme leaf, but of a fresher green; and putteth forth a little string into the water, far from the bottom.
Bacon.

Back, shepherds, back; enough your play
Till next sunshine holyday;
Here be without *duck* or nod,
Other trippings to be trod,
Of lighter toes, and such court guise
As Mercury did first devise. *Milton.*

The *ducks*, that heard the proclamation cried,
And feared a prosecution might betide,
Full twenty mile from town their voyage take,
Obscure in rushes of the liquid lake. *Dryden.*

Thou art wickedly devout;
In Tiber *ducking* thrice by break of day. *Id.*

Ducklegged, short waisted, such a dwarf she is,
That she must rise on tiptoes for a kiss.
Id. Juvenal.

Ducklings, though hatched and led by a hen, if she brings them to the brink of a river or pond, presently leave her, and in they go. *Ray on the Creation.*

As some raw youth in country bred,
When at a skirmish first he hears
The bullets whistling round his ears,
Will *duck* his head aside, will start,
And feel a trembling at his heart. *Swift.*

She in the *duckingstool* should take her seat,
Drest like herself in a great chair of state.
Dorset.

Reclaim the obstinately opprobious and virulent women, and make the *duckingstool* more useful.
Addison's Freeholder.

Every morn
Amid the *ducklings* let her scatter corn.
Gay's Pastoral.

Neither cross and pile, nor *ducks* and drakes, are quite so ancient as handy-dandy.
Arbuthnot and Pope.

But still 'tis rural—trees are to be seen
From every window, and the fields are green;
Ducks paddle in the pond before the door,
And what could a remoter scene show more?
Cowper.

The wanton coot the water skims,
Amang the leaves the *ducklings* cry,
The stately swan majestic swims,
And every thing is blest but I. *Burns.*

The love of offspring's nature's general law,
From tigresses and cubs to *ducks* and *ducklings*;
There 's nothing whets the beak or arms the claw
Like an invasion of their babes and sucklings.
Byron.

Duck, in ornithology. See Anas and Decoy. This fowl is furnished with a peculiar structure of vessels about the heart, which enables it to live a considerable time under water, as is necessary for it in diving. This made Mr. Boyle think it a more proper subject for experiments with the air-pump than any other bird. A full grown duck being put into the receiver of an air-pump, of which she filled one third part, and the air exhausted, the creature seemed to bear it better for the first moments, than a hen or other fowl; but, after about a minute, she showed great signs of uneasiness, and in less than two minutes her head fell down, and she appeared dying, till revived by the letting in of air. A young callow duck was afterwards tried in the same manner, and with the same issue, it being nearly reduced to death in less than two minutes. But it is observable, that both birds swelled very much on pumping out the air, so that they appeared greatly larger to the spectators, especially about the crop; it not being intended that any water fowl should live in so exceedingly rarefied air, but only be able to continue occasionally some time under water. The strongest instance of these creatures being calculated to live almost in any situation, we have in the accounts of the blind ducks in the Czirknitz Zee lake in Carniola; which is supposed to communicate with another lake under ground in the mountain Savornic, and to fill or empty itself according to the emptiness or fulness of that lake. See Czirknitz Zee. The ducks which always frequent it in great numbers, are often carried down along with the water, and forced into the subterraneous lake to which it retires. In this unnatural habitation, many of these creatures undoubtedly perish, but some remain alive. These become blind, and lose their feathers; and in the next filling of the lake, both they and vast numbers of fish are thrown up by the water. In about a fortnight they are said to recover their sight and feathers.

DUCKING, plunging in water, a diversion anciently practised among the Goths by way of exercise; but among the Celtæ, Franks, and ancient Germans, it was a sort of punishment for persons of scandalous lives. At Marseilles and Bourbon,

before the revolution, men and women of scandalous life were condemned to the cale; i. e. to be shut up in an iron cage fastened to the yard of a shallop, and ducked several times in the river. The same was done at Toulouse to blasphemers.

DUCKING, a sort of marine punishment, inflicted by the French before the revolution, on those who had been convicted of desertion, blasphemy, or sedition. It was thus performed: The criminal was placed astride of a short thick batten, fastened to the end of a rope, which passed through a block hanging at one of the yard-arms. Thus fixed, he was hoisted suddenly up to the yard, and the rope being slackened at once, he was plunged into the sea. This was repeated several times conformably to the sentence against the culprit, who had also several cannon-shot fastened to his feet. A gun was aiso fired to advertise the other ships of the fleet, that their crews might become spectators.

DUCKING is also a penalty which veteran sailors pretend to have a right to inflict on those who, for the first time, pass the tropic of Cancer, the equator, or the straits of Gibraltar, in consequence of their refusal or incapacity to pay the usual fine levied on such occasions.

DUCKING-STOOL. See BRANK and CUCKING-STOOL.

DUCKO'Y, *v. a.* & *n. s.* Mistaken for decoy: the decoy being commonly practised upon ducks, produced the error. To entice to a snare: the snare laid.

This fish hath a slender membranous string, which he projects and draws in at pleasure, as a serpent doth his tongue: with this he *duckoys* little fishes, and preys upon them. *Grew.*

Seducers have found it the most compendious way to their designs, to lead captive silly women, and make them the *duckoys* to their whole family. *Decay of Piety.*

DUCK UP, is a phrase used at sea by the steers-man, when the main sail, fore sail, or sprit sail, hinders his seeing to steer by a land-mark: upon which he calls out, duck up the clew-lines of these sails, that is, hale the sails out of the way. When a shot is made by a chace-piece, if the clew of the sprit sail hinders the sight, they call out duck up, &c.

DUCT, *n. s.* Lat. *ductus*, from *duco*, to lead. Guidance; direction: a passage through which any thing is conducted.

This doctrine, by fastening all our actions by a fatal decree at the foot of God's chair, leaves nothing to us but only to obey our fate, to follow the *duct* of the stars, or necessity of those irony chains which we are born under. *Hammond.*

A *duct* from each of those cells ran into the root of the tongue, where both joined together, and passed forward in one common *duct* to the tip of it. *Addison's Spectator.*

It was observed that the chyle, in the thoracic *duct*, retained the original taste of the aliment. *Arbuthnot on Aliments.*

DUCTILE, *adj.* } Lat. *ductilis*, from *duc-*
DUC'TILENESS, *n. s.* } *tus*, part. of *duco*, to lead.
DUCTIL'ITY. } Tensile; easy to be drawn out.

All bodies *ductile* and tensile, as metals, that will be drawn into wires; wool and tow, that will be drawn into yarn or thread; have the appetite of not discontinuing strong. *Bacon.*

I, when I value gold, may think upon
The *ductileness*, the application;
The wholesomeness, the ingenuity,
From rust, from soil, from fire ever free.
Donne

Thick woods and gloomy night
Conceal the happy plant from human sight:
One bough it bears; but wond'rous to behold!
The *ductile* rind and leaves of radiant gold.
Dryden's Æneid.

Yellow colour and *ductility* are properties of gold: they belong to all gold, but not only to gold; for saffron is also yellow, and lead is *ductile*. *Watts's Logick.*

He generous thoughts instils
Of true nobility; forms their *ductile* minds
To human virtues. *Philips.*

Their designing leaders cannot desire a more *ductile* and easy people to work upon. *Addison's Freeholder.*

Hence *ductile* clays in wide expansion spread,
Soft as the cygnet's down, their snow-white bed;
With yielding flakes successive forms reveal,
And change obedient to the whirling wheel.
Darwin.

DUCTILITY, in physics, a property possessed by certain solid bodies, which consists in their yielding to percussion or pressure, and in receiving different forms without breaking. Some bodies are ductile both when they are hot and when they are cold, and in all circumstances. Such are metals, particularly gold and silver. Other bodies are ductile only when heated to a sufficient degree; such as wax and other substances of that kind, and glass. Other bodies, particularly some kinds of iron, called by the workmen red-short, brass, and some other metallic mixtures, are ductile only when cold, and brittle when hot. The degrees of heat requisite to produce ductility in bodies of the first kind, vary according to their different natures. In general, the heat of the body must be such as is sufficient to reduce it to a middle state betwixt solidity and perfect fusion. As wax for instance, is fusible with a very small heat, it may be rendered ductile by a still smaller one; and glass, which requires a most violent heat for its perfect fusion, cannot acquire its greatest ductility until it is made perfectly red-hot, and almost ready to fuse. Lastly, some bodies are made ductile by the absorption of a fluid. Such are certain earths, particularly clay. When these earths have absorbed a sufficient quantity of water, to bring them into a middle state betwixt solidity and fluidity, that is to the consistence of a considerably firm paste, they have then acquired their greatest ductility. Water has precisely the same effect upon them in this respect, that fire has upon the bodies above-mentioned.

The ductility of metals is distinguished into three states by professor Chaptal, relative to the manner in which it is modified by various processes: viz. 1. Under the hammer: 2. Through the wire-drawer's plate; and 3. Between the laminating rollers. Metals ductile under the hammer he ranks thus, in the order of their ductility: gold, silver, copper, iron, tin, and lead. Through the wire-drawer's plate they rank in this order: gold, iron, copper, silver, tin, and lead. Some metals that are neither ductile under the hammer, nor through the plate, become very

considerably so, when an equal and gradual pressure is applied. Thus zinc may be reduced into very thin and flexible leaves by being passed between the laminating cylinders.

DUDG'EON. Anciently dadgeon, a diminutive of *dag;* or, says Dr. Johnson, from Germ. *dolch*, a dirk; or *degen*, a sword. A dagger; a quarrel in which daggers are either used, or 'spoken;' ill temper.

> It was a serviceable *dudgeon*,
> Either for fighting or for drudging.
> *Hudibras.*
>
> Civil *dudgeon* first grew high,
> And men fell out they knew not why. *Id.*
>
> The cuckoo took this a little in *dudgeon*.
> *L'Estrange.*

DUDLEY (Edmund), an eminent lawyer and able statesman in the reign of Henry VII. who, with Sir Richard Empson, assisted in filling that rapacious monarch's coffers, by arbitrary prosecutions of the people, on old penal statutes. They were both beheaded on the accession of Henry VIII. to pacify the clamors of the people for justice.

Dudley (John), duke of Northumberland, son of the above, a statesman memorable in the English history, for his unsuccessful attempt to place the crown on the head of his daughter-in-law, lady Jane Grey, who fell a victim to his ambition; was born in 1502, and beheaded in 1553. Ambrose his eldest son was a brave, generous and able statesman under queen Elizabeth; and received the appellation of the good earl of Warwick. Henry, his second son, was killed at the siege of St. Quintin. Robert, the third son, a man of bad character, was created earl of Leicester; and was one of queen Elizabeth's favorites. His fourth son, was the unfortunate lord Guildford Dudley, whose only crime was his being the husband of lady Jane Grey, for which he was beheaded in 1554.

Dudley (Sir Robert), earl of Warwick and duke of Northumberland, was the son of Robert above-mentioned, by the lady Douglas Sheffield; and was born at Sheen in Surrey in 1573, where he was carefully concealed, to prevent the queen's knowledge of the earl's engagements with his mother. He studied at Oxford; when his father dying, left him the bulk of his estate. Having a particular fondness for navigation, he fitted out a small squadron at his own expense, with which he sailed to the river Oronoco, and took and destroyed nine sail of Spanish ships. In 1595 he attended the earl of Essex, and the lord high admiral of England, in their expedition against the Spaniards; when he was knighted for his gallant behaviour at the taking of Cadiz. He now endeavoured to prove the legitimacy of his birth, in order to be entitled to his hereditary honors. But being overpowered by the interest of the countess dowager of Leicester, he applied for a licence to travel; and, being well received at the court of Florence, resolved to continue there, notwithstanding his receiving a letter of recall; on which his whole estate was seized by king James I. and vested in the crown. He discovered at the court of Cosmo II., great duke of Tuscany, those great abilities for which he had been admired in England, and was at length made chamberlain to his highness's consort. He there contrived several methods of improving shipping; introduced new manufactures; and by other services obtained so high reputation, that, at the desire of the archduchess, the emperor Ferdinand, in 1620, created him a duke of the holy Roman empire. He afterwards drained a vast tract of morass between Pisa and the sea; and raised Leghorn, which was then a mean, pitiful place, into a large and beautiful town, improving the haven by a mole, which rendered it both safe and commodious; and having engaged his highness to declare it a free port, he, by his influence and correspondence, drew many English merchants to settle and set up houses there, which was of very great service to his native country, as well as to the Spaniards. He was also the patron of learned men, and held a high place himself in the republic of letters. His most celebrated work is his Del Arcano del Mare, in 2 vols, folio.

Dudley (Rev. Sir Henry Bate), was born at Fenny Compton, August 25th 1745. His father, Henry Bate, was rector of St. Nicholas in Worcester, and of North Farmbridge, in Essex. The son also was educated for the church, and took his degrees in arts at the University of Cambridge, after which he became curate of Hendon in Middlesex. At this period of his life, however, he became entirely a man of pleasure; but exhibited considerable literary talent, and established in succession, the Morning Post, and Morning Herald, newspapers. He also produced some dramatic pieces, of which the principal were, The Rival Candidates, The Flitch of Bacon, and The Woodman. In the year 1781 the advowson of Bradwell juxta Mare, in Essex, was purchased in trust for Mr. Bate, subject to the life of the incumbent; without waiting for whose demise, he commenced those extensive alterations and improvements of the church, parsonage, and glebe, which are said to have cost him upwards of £28,000. But when in 1797 he applied for institution, on the death of the incumbent of the living, the bishop of London refused him on the ground of simony. Shortly afterwards the rectory lapsed to the crown, and Dr. Gamble was presented to it. This was considered an exceedingly hard case, and very nearly ruined Mr. Dudley, who had now taken this addition to his name in compliance with the will of a relative. In 1804 he was in some degree compensated for his loss, by a presentation to the rectory of Kilscoren in Ireland, and the chancellorship of the cathedral of Ferns; to which, three years afterwards, was added the living of Kilglass, in the county of Longford. In 1812 he resigned the two Irish benefices, on being presented to the rectory of Willingham in the county of Cambridge; and the same year was created a baronet. In 1816 he obtained a prebend in the cathedral of Ely. Sir Henry was at one time magistrate for seven counties in England and four in Ireland. He died at Cheltenham, February 1st, 1824

Dudley, a town of England, of the county of Worcester, but insulated in Staffordshire, has a weekly market on Saturday. Most of the inhabitants are employed in manufacturing nails, or

other articles of iron. It has two churches; and is ten miles west of Birmingham, and 120 north-west of London.

DUE, *n. s. adj.* & *v. a.*
DU'EFULL,
DUTY, *n. s.*
DU'TEOUS, *adj.*
DU'TEOUSNESS, *n. s.*
DU'TIFUL, *adj.*
DU'TIFULLY, *adv.*
DU'TIFULNESS, *n. s.*

From δεω, to bind; Lat. *debeo*, to owe. That which is owed; right; obligation; whatever is required to be done or paid. As an adjective due is, owed; proper; fit; exact; consequent to. Shakspeare uses it as an active verb; but we have met with no other instance. Duty is also obligation, and reciprocal with right. What one man has a right to claim, another has a duty to yield or give.

When ye shall have done all those things which are commanded you, say, We are unprofitable servants: we have done that which was our *duty* to do. *Luke* xvii. 10.

They both atone,
Did *duty* to their lady as became.
Faerie Queene.

All which that day in order seemly good
Did on the Thames attend, and waited well
To doe their *duefull* service as to them befell.
Spenser.

This is the latest glory of their praise,
That I thy enemy *due* thee withal. *Shakspeare.*
My *due* from thee is this imperial crown,
Which, as immediate from thy place and blood,
Derives itself to me. *Id.*

Like the Pontick sea,
Whose icy current, and compulsive course,
Ne'er feels retiring ebb, but keeps *due* on
To the Propontick and the Hellespont.
Id. Othello.

My prayers
Are not words *duly* hallowed, nor my wishes
More worth than vanities; yet prayers and wishes
Are all I can return. *Id. Henry VIII.*

Thou better know'st
Effects of courtesy, *dues* of gratitude;
Thy half o' th' kingdom thou hast not forgot,
Wherein I thee endowed. *Id. King Lear.*

Think'st thou that *duty* shall have dread to speak,
When power to flatt'ry bows? To plainness honour
Is bound, when majesty to folly falls. *Id.*

I know thee well; a serviceable villain!
As *duteous* to the vices of thy mistress,
As badness would desire. *Id.*

There is *due* from the judge to the advocate some commendation and gracing, where causes are well handled and fair pleaded. There is likewise *due* to the public a civil reprehension of advocates, where there appeareth cunning, gross neglect, or slight information. *Bacon.*

The key of this infernal pit by *due*,
And by command of heaven's all-powerful king,
I keep. *Milton. Paradise Lost.*

And Eve within, *due* at her hour prepared
For dinner savoury fruits. *Id.*

Befriend
Us, thy vowed priests, till outmost end
Of all thy *dues* be done, and none left out. *Id.*

Every beast, more *duteous* at her call,
Than at Circean call the herd disguised. *Id.*

Some *duties* we owe to humanity, more to nearness of blood. *Bp. Hall. Contemplations.*

All our *duty* is set down in our prayers, because in all our *duty* we beg the Divine assistance; and remember that you are bound to do all those *duties*, for the doing of which you have prayed for the Divine assistance. *Taylor's Devotion.*

It is a strange kind of civility, and an evil *dutifulness* in friends and relatives, to suffer him to perish without reproof or medicine, rather than to seem unmannerly to a great sinner.
Id. Rule of Holy Living.

The regiment did *duty* there punctually.
Clarendon.

The motion of the oily drops may be in part *due* to some partial solution made by the vinous spirit, which may tumble them to and fro. *Boyle.*

I take this garland, not as given by you,
But as my merit and my beauty's *due*. *Dryden.*

A female softness, with a manly mind;
A *duteous* daughter, and a sister kind;
In sickness patient, and in death resigned. *Id.*

See how the madmen bleed! behold the gains
With which their master, love, rewards their pains!
For seven long years, on *duty* every day,
Lo! their obedience, and their monarch's pay. *Id.*

Piety, or *dutifulness* to parents, was a most popular virtue among the Romans. *Id. Æneid.*

In the body, when the principal parts, as the heart and liver, do their offices, and all the inferiour smaller vessels act orderly and *duly*, there arises a sweet enjoyment upon the whole, which we call health. *South.*

You might see him come towards me beating the ground in so *due* time, as no dancer can observe better measure. *Sidney.*

There would she kiss the ground, and thank the trees, bless the air, and do *dutiful* reverence to every thing she thought did accompany her at their first meeting. *Id.*

Not that I want a *due* respect to other men's opinions; but, after all, the greatest reverence is *due* to truth. *Locke.*

The pain children feel from any necessity of nature, it is the *duty* of parents to relieve. *Id.*

In respect of the exorbitant *dues* that are paid at most other ports, this deservedly retains the name of free. *Addison.*

Who taught the bee with winds and rains to strive,
To bring her burden to the certain hive;
And through the liquid fields again to pass
Duteous, and hark'ning to the sounding brass?
Prior.

If attention be *duly* engaged to those reflections, they cannot fail of influence. *Rogers.*

No popular assembly ever knew, or proposed, or declared, what share of power was their *due*. *Swift.*

He with joyful, nimble wing,
Flew *dutifully* back again,
And made an humble chaplet for the king. *Id.*

She died in an extreme old age, without pain, under the care of the most *dutiful* son that I have ever known or heard of. *Swift to Pope.*

Seldom at church, 'twas such a busy life;
But *duly* sent his family and wife. *Pope.*

Opportunity may be taken to excite, in persons attending on those solemnities, a *due* sense of the vanity of earthly satisfactions. *Atterbury.*

God's party will appear small, and the king's not greater; it being not probable, that those should have sense of *duty* to him that had none to God.
Decay of Piety.

Otho, as often as Galba supped with him, used to give every soldier upon *duty* an aureus.
Arbuthnot on Coins.

Mirth and cheerfulness are but the *due* reward of innocency of life. *More's Divine Dialogues.*

A present blessing upon our fasts is neither originally *due* from God's justice, nor becomes *due* to us from his veracity. *Smalridge's Sermons.*

There is a respect *due* to mankind, which should incline ever the wisest of men to follow innocent customs. *Watts.*

The *duty* of a collator is indeed dull, yet, like other tedious tasks, is very necessary. *Johnson.*

Turn on the prudent ant thy heedful eyes,
Observe her labours, sluggard, and be wise:
No stern command, no monitory voice,
Prescribes her *duties*, or directs her choice;
Yet timely provident, she hastes away,
To snatch the blessings of the plenteous day.
Id. Poems.

Nothing is more common than to say, when a person does not behave with *due* decency towards his superiours, such a one does not understand himself. *Mason.*

Estates are landscapes, gazed upon awhile,
Then advertised, and auctioneered away.
The country starves, and they that feed the' o'ercharged
And surfeited lewd town with her fair *dues*,
By a just judgment strip and starve themselves.
Cowper.

Duly at my time I come,
Publishing to all aloud—
Soon the grave must be your home,
And your only suit a shroud. *Id.*

'Do as you would be done by,' and 'Love your neighbour as yourself,' include all our *duties* of benevolence and morality; and if sincerely obeyed by all nations, would a thousand-fold multiply the present happiness of mankind. *Darwin.*

Whatever tenderness may be *due* to the errors into which they would inevitably fall in their speculations concerning the present condition of mankind, and the apparent constitution of the moral world, of which, destitute as they were of the light of revelation, they knew neither the beginning nor the end,—the Christian is possessed of a written rule, delivered from on high, which is treated with profane contempt, if reference be not had to it upon all questions of *duty*. *Bp. Horsley.*

Salt, *duty* free, is a great deal cheaper, and (as far as experiments have gone) very superior in power and permanency of effect to lime. *Sir T. Bernard.*

Triumphant Sylla! Thou, who didst subdue
Thy country's foes ere thou would pause to feel
The wrath of thy own wrongs, or reap the *due*
Of hoarded vengeance till thine eagles flew
O'er prostrate Asia. *Byron.*

Forgive me; there is something at your heart
More than the mere discharge of public *duties*,
Which long use, and a talent like to yours,
Have rendered light, nay, a necessity
To keep your mind from stagnating. *Id.*

DU'EL, *n. s.*, *v. n.* & *v. a.* } Fr. *duel*, from
DU'ELLER, *n. s.* } Lat. *duellum*, i. e.
DU'ELLIST. } *duo*, two and *bellum*, war. A
DUEL'LO. } fight or combat between two. Dueller and duellist appear synonymous.

The gentleman will, for his honour's sake, have one bout with you: he cannot by the *duello* avoid it. *Shakspeare.*

In many armies, if the matter should be tried by *duel* between two champions, the victory should go on the one side; and yet, if it be tried by the gross, go on the other side. *Bacon.*

Victory and triumph to the Son of God
Now entering his great *duel*, not of arms,
But to vanquish by wisdom, hellish wiles.
Milton.

Who single
Duelled their armies ranked in proud array,
Himself an army, now unequal match
To save himself against a coward armed,
At one spear's length. *Id. Agonistes.*

His bought arms Mung not liked; for his first day
Of bearing them in field, he threw 'em away;
And hath no honour lost, our *duellists* say.
Ben Jonson.

'Twas I that wronged you; you my life have sought;
No *duel* ever was more justly fought. *Waller.*

Henceforth let poets, ere allowed to write,
Be searched like *duellists* before they fight.
Dryden.

He must at length, poor man! die dully at home, when here he might so fashionably and genteelly have been *duelled* or fluxed into another world. *South.*

If the king ends the differences, the case will fall out no worse than when two *duellists* enter the field, where the worsted party hath his sword again, without further hurt. *Suckling.*

I never read of a *duel* among the Romans, and yet their nobility used more liberty with their tongues than one may now do without being challenged. *Tatler.*

They perhaps begin as single *duellers*, but then they soon get their troops about them. *Decay of Piety.*

DUEL, a single combat, at a time and place appointed, in consequence of a challenge. This custom came originally from the northern nations, among whom it was usual to decide all their controversies by arms. Both the accuser and accused gave pledges to the judges on their respective behalf; and the custom prevailed so far amongst the Germans, Danes, and Franks, that none were excused from it but women, sick people, cripples, and such as were under twenty-one years of age or above sixty. Even ecclesiastics, priests, and monks, were obliged to find champions to fight in their stead. The punishment of the vanquished was either death, by hanging or beheading, or mutilation of members, according to the circumstances of the case. Duels were at first admitted not only on criminal occasions, but on some civil ones, for the maintenance of rights or estates, and the like: in latter times, however, before they were entirely abolished, they were restrained to these four cases. 1. That the crime should be capital. 2. That it should be certain the crime was perpetrated. 3. The accused must by common fame be supposed guilty. And 4. The matter must not be capable of proof by witnesses.

DUEL, at present, is used for single combat on some private quarrel; and is premeditated; otherwise it is called a rencounter. If a person is killed in a duel, both the principals and seconds are guilty, whether the seconds engage or not. See MURDER. It is also a very high offence to challenge a person either by word or letter, or to be the messenger of a challenge. See LAW. The general practice of duelling, in this last sense, took its rise in 1527, at the breaking up of a treaty between the emperor Charles V. and Francis I. The former desired Francis's herald to acquaint his sovereign, that he would hence-

forth consider him not only as a base violator of public faith, but as a stranger to the honor and integrity of a gentleman. Francis, too high-spirited to bear such an imputation, had recourse to an uncommon expedient to vindicate his character. He instantly sent back the herald with a cartel of defiance, in which he gave the emperor the lie in form, challenging him to single combat, requiring him to name the time and place of encounter, and the weapons with which he chose to fight. Charles, as he was not inferior to his rival in spirit or bravery, readily accepted the challenge; but after several messages, concerning the arrangement of all the circumstances relative to the combat, accompanied with mutual reproaches bordering on the most indecent scurrility, all thoughts of this duel, more becoming the heroes of romance than the two greatest monarchs of their age, were entirely laid aside. The example of two persons so illustrious, drew such general attention, and carried with it so much authority, that it had considerable influence in introduciug an important change in manners all over Europe. Duels had been long permitted by the laws of all European nations; and, forming a part of their jurisprudence, were authorised by the magistrate on many occasions, as the most proper method of terminating questions with regard to property, or of deciding in those which regarded crimes. But single combats being considered as solemn appeals to the omniscience and justice of the Supreme Being, they were allowed only in public causes, according to the prescription of law, and carried on in a judicial form. See Battel. Men accustomed to this manner of decision in courts of justice, were naturally led to apply it to personal and private quarrels. Duels, which at first could only be appointed by the civil judge, were fought without the interposition of his authority, and in cases to which the laws did not extend. Upon every affront or injury, which seemed to touch his honor, a gentleman thought himself entitled to draw his sword, and to call on his adversary to make reparation. Such an opinion, introduced among men of fierce courage and high spirit, and of rude manners, where offence was often given, and revenge was always prompt, produced most fatal consequences. Much blood was shed; many useful lives were lost; and, at some periods, war itself has hardly been more destructive than these contests of honor. So powerful, however, is the dominion of fashion, that neither the terror of penal laws, nor reverence for religion, nor the fear of a future state, has yet been able entirely to abolish a practice unknown among the ancients, and not justifiable by any principle of reason. Its best defence only seals the greater disgrace on the parties who have recourse to it; i. e. that we must ascribe to it, in some degree, the extraordinary gentleness and complaisance of modern manners in high life, and that respectful attention of one man to another, which at present renders the social intercourse of life far more agreeable and decent than among civilised nations of antiquity. In other words, that gentlemen can only be governed by the weapons of fear and force by which, in fact, the vilest ruffians are at last restrained. Public opinion, however, is not easily controlled by civil institutions; for which reason it may be questioned whether any human regulations can be contrived of sufficient force to suppress or change that false rule of honor, which stigmatises all scruples about duelling with the reproach of cowardice. The inadequate redress which the law of the land affords, for those injuries which chiefly affect a man in his sensibility and reputation, tempts many to redress themselves; and prosecutions for such offences, by the trifling damages that are recovered, serve only to make the sufferer ridiculous. This ought to be remedied. A court of honor might be established, especially for the army, where the point of honor is cultivated with exquisite attention and refinement, with a power of awarding those submissions and acknowledgments, which it is generally the object of a challenge to obtain; and it might grow into a fashion with person of rank of all professions, to refer their quarrels to the same tribunal. In fact, as the law now stands, duelling can seldom be overtaken by legal punishment. The challenge, appointment, and other previous circumstances, which indicate the intention with which the combatants met, being suppressed, nothing appears to a court of justice but the actual rencounter; and if a person be slain when actually fighting with his adversary, the law deems his death nothing more than manslaughter.

DUE'NNA, *n. s.* Spanish. An old woman kept to guard a younger.

> I felt the ardour of my passion increase as the season advanced, till in the month of July I could no longer contain: I bribed her *duenna*, was admitted to the bath, saw her undressed, and the wonder displayed. *Arbuthnot and Pope.*

DUETT, duetto, in music, a composition expressly written for two voices or instruments, with or without a bass and accompaniments. In good duets the execution is pretty equally distributed between the two parts, and the melodies so dependent on each other, as to lose every effect when separated, but to be perfectly related and concinnous when heard together.

DUFF'S Islands, or Duff's Group, a range of islands in the South Pacific Ocean, discovered by captain Wilson, in the course of his missionary voyage in the Duff. They are about eleven in number, and extend fourteen or fifteen miles in a north-west to south-east direction. They are of different sizes; the smallest is apparently barren, but the largest two, which are about six miles in circumference, and situated in the middle of the others, are well wooded. Between these two there is a small islet; and at the end of one on the north-west part of the group rises a remarkable rock in the shape of a pillar. The natives, who are stout and well made, were shy and apprehensive of strangers. A village was seen on the south-west side of Disappointment Island, the largest of this group. They have ornamented canoes about twelve or fourteen feet long, and about fifteen inches broad, which seemed to be made of a single tree. Long. 167° E., lat. 9° 57′ S.

DUG, *n. s.* Swed. *dagghe:* Isl. and Goth. *deggia*, to give suck, from Goth. *dy*, milk; or

Heb. דד, the paps. A pap, or teat; generally spoken of animals.

Of her there bred
A thousand young ones, which she daily fed,
Sucking upon her poisonous *dugs*; each one
Of sundry shape, yet all ill-favoured.
Faerie Queene.

It was a faithless squire that was the source
Of all my sorrow, and of these sad tears;
With whom, from tender *dug* of common nourse,
At once I was up brought. *Id.*

As mild and gentle as the cradle babe,
Dying with mother's *dug* between its lips.
Shakspeare.

They are first fed and nourished with the milk of a strange *dug*. *Raleigh's History.*

Then shines the goat, whose brutish *dugs* supplied
The infant Jove, and nurst his growing pride.
Creech.

DUGDALE (Sir William), an eminent English historian, antiquarian, and herald, born in Warwickshire in 1605. He was introduced into the herald's office by Sir Christopher Hatton; and ascended gradually through all the degrees, until he became garter principal king at arms. His chief work is the Monasticum Anglicanum, in 3 vols. folio; containing the charters and descriptions of all the English monasteries, adorned with engravings. Nor are his Antiquities of Warwickshire less esteemed. He wrote likewise the History of St. Paul's Cathedral; a History of Embanking and Draining; a Baronage of England: and completed the second volume of Sir Henry Spelman's Councils, with a second part of his Glossary. He died in 1686. His son John was Norroy king at arms, and published a Catalogue of English Nobility.

DUGOMMIER (M.), a French republican general, a native of Martinique in the West Indies, where, at the beginning of the revolution, he defended Fort St. Pierre against a body of troops sent from France. He was at this time a considerable proprietor, and colonel of the national guards of the island. He afterwards went to France to procure succours for the patriots. In 1793 he rapidly rose to be general of brigade; and then commander in chief of the army in Italy, where he gained many advantages with a very inferior force. He took Toulon December 19th, 1793, as commander in chief of the army of the Eastern Pyrenees, and prosecuted the war against the Spaniards with great success. On the 1st of May, 1794, he gained the battle of Alberdes, and seized Montesquieu, taking 200 pieces of cannon, and 2000 prisoners. In August, 1794, he defeated an army of nearly 50,000 men at St. Laurence de la Mouga, and was killed November 17th, in an engagement at St. Sebastian. The convention decreed that his name should be inscribed on a column of the Pantheon.

DUILLIA Lex, the Duillian law, a Roman law, enacted by M. Duillius, a tribune, A. U. C. 304. It made it a capital crime to leave the Roman people without its tribunes, or to create any new magistrate without a sufficient cause. There was another Duillian law in 392, regulating the interest to be paid for money lent.

DUILLIUS Nepos (Caius), a Roman consul, the first who obtained a victory over the naval power of Carthage, A. U. C. 492. He took fifty ships, and was honored with a naval triumph, the first that ever appeared at Rome. The senate rewarded his valor by permitting him to have music playing, and torches lighted, at the public expense, every day while he was at supper. There were some medals struck in commemoration of this victory; and there still exists a column at Rome, which was erected on the occasion.

DUISBURG, a town of Prussia, in the circle of Westphalia, and that part of the former duchy of Cleves which lies on the east, or right bank of the Rhine. It has two churches, three convents. The university founded here for Protestants, in 1635, was removed to Dusseldorf in 1806. Its chief manufactures are in cloth and iron. It is seated on the Roer, a little below where it falls into the Rhine. Inhabitants about 4600. It lies fourteen miles north of Dusseldorf, and thirty-five north-west of Cologne.

DUKE, *n.s.* } Fr. *duc*; Span. and Port.
Duke'dom. } *duque*; Ital. *duca*, from Lat. *dux*, *ducis*, à *duco*, to lead. See the article.

And thou Bethleem, the lond of Juda, for of thee a *duyk* schal go out that schal gouerne my puple of Israel. *Wiclif.*

The *duke* of Cornwall, and Regan his dutchess, will be here with him this knight.
Shakspeare. King Lear.

Her brother found a wife,
Where he himself was lost; Prospero his *dukedom*,
In a poor isle. *Id. Tempest.*

Aumarle, Surrey, and Exeter, must lose
The names of *dukes*, their titles, dignities,
And whatsoever profits thereby rise.
Dan. Civil Wars.

The cardinal never resigned his purple for the prospect of giving an heir to the *dukedom* of Tuscany. *Addison.*

A prince can mak a belted knight,
A marquis, *duke*, and a' that;
But an honest man's aboon his might,
Guid faith he mauna fa' that! *Burns.*

Duke, dux, was originally a Roman dignity, denominated à ducendo, leading or commanding. Accordingly, the first dukes, duces, were ductores exercituum, commanders of armies. Under the later emperors, the governors of provinces during war were entitled duces. In after times the same denomination was also given to the governors of provinces, in time of peace. The first governor under this name was a duke of the Marchia Rhætica, or Grisons, of whom mention is made in Cassiodorus; there were afterwards thirteen dukes in the eastern empire, and twelve in the western. The Goths and Vandals, upon their overrunning the provinces of the western empire, abolished the Roman dignities wherever they settled. But the Franks, &c., to please the Gauls, who had long been used to that form of government, made it a point of politics not to change any thing therein: and accordingly they divided all Gaul into duchies and counties; and gave the names, sometimes of dukes, and sometimes of counts, comites, to the governors of them. In England, during the time of the Saxons, Camden observes, the officers and commanders of armies were called dukes, duces, after the ancient Roman manner,

thout any addition. After the Conqueror me in, the title lay dormant till the reign of lward III., who created his son Edward, first led the Black Prince, duke of Cornwall; ich has ever since been the peculiar inheri- ice of the king's eldest son during the life of father; so that he is dux natus, non creatus. ter him there were more made, in such man- r as that their titles descended to their pos- ity. They were created with much solemnity, r cincturam gladii, cappæque, et circuli rei in capite impositionem. However, in the gn of queen Elizabeth, A. D. 1572, the whole ler became utterly extinct; but it was revived out fifty years afterwards by her successor, in person of George Villiers, duke of Bucking- m. Though the French retained the names d form of the ducal government, yet under ir second race of kings there were scarcely any kes: but all the great lords were counts, ers, or barons; excepting, however, the dukes Burgundy and Aquitain, and the duke of ance, which was a dignity Hugh Capet him- f held, corresponding to that of maire de lais, or king's lieutenant. By the weakness the kings, the dukes or governors sometimes de themselves sovereigns of the provinces sted to their administration. This change ppened chiefly about the time of Hugh Capet, en the lords began to dismember the king- m, so that that prince found more competitors ong them than subjects. It was even with a at deal of difficulty they could be brought to n him their superior, or to hold of him by th and homage. By degrees those provinces, th duchies and counties, which had been rent m the crown, were again united to it. But title duke was no longer given to the gover- rs of provinces. From that time it became a re title of dignity, annexed to a person and heirs male, without giving him any domain, ritory, or jurisdiction over the place whereof was duke. All the advantages therefore now sist in the name, and the precedence it es. Modern dukes retain nothing of their cient splendor but the coronet on their utcheon. It is com- sed of a rim of gold, ed with ermine, and mounted with eight awberry leaves, in con- distinction from that a marquis, which has ly four strawberry ves and four pearls. e the annexed dia- m. They are created by patent, cincture of sword, mantle of state, imposition of a pe, and coronet of gold upon the head, and a rge of gold in their hand. The eldest sons of kes are by the courtesy of England styled rquisses, though they are usually distin- ished by their father's second title, whether it marquis or earl; and the younger sons lords, th the addition of their Christian name, as d James, lord Thomas, &c., and they take ace of viscounts, though not so privileged by w. A duke has the title of grace; and he is led, in heraldic language, most high, potent,

and noble prince. Dukes of the blood royal are styled most high, most mighty, and illustrious princes. There are also sovereigns who bear the title of duke. The title of GREAT DUKE belongs to the heir-apparent of Russia; that of ARCH-DUKE to all the sons of the house of Austria, and that of ARCH-DUCHESS to all the daughters. See these articles.

DUKE, among Hebrew grammarians, is an appellation given to a species of accents answering to our comma. See ACCENT.

DUKE (Richard), a clergyman and inferior poet of the last century. Dr. Johnson says, 'His poems are not below mediocrity, nor have I found much in them to be praised.' He was a native of Otterton in Devonshire, and educated at Westminster school, and Trinity College, Cambridge, where he obtained a fellowship. He was presented to the living of Blaby in Leicestershire in 1688, and was soon after made a prebend of Gloucester. Just previous to his death, which took place in 1710, he became possessed of the valuable benefice of Witney in Oxfordshire. He was the author of Translations of some of the Odes of Horace, and some detached poems.

DUKE-DUKE, a title given in Spain to a grandee of the house of Sylva, on account of his having several duchies, from the uniting of two considerable houses in his person. Don Roderigo de Sylva, eldest son of Don Ruy Gomez de Sylva, and heir of his duchies and principalities, married the eldest daughter of the duke de l'Infantado; by which marriage the present duke de Pastrana, who is descended therefrom, and is grandson of Don Roderigo de Sylva, has added to other titles that of duke-duke, to distinguish himself from the other dukes; some whereof may enjoy several duchies, but none so considerable ones, nor the titles of such eminent families.

DUKE'S COUNTY, a county on the south-east coast of the state of Massachusetts, comprehending Martha's Vineyard Island, Chabaquiddick Island, Norman's Island, and the Elizabeth Islands. The chief town is Edganton. Population 3290.

DUKE OF CLARENCE'S STRAIT is a channel on the east coast of North America, bounded on the east by the Duke of York's Islands, part of the continent, and the isles of Gravina. To the west the shore is an extensive tract of land, forming an archipelago, to which Vancouver gave the name of the Prince of Wales's Archipelago.

The DUKE OF GLOUCESTER'S ISLANDS are two woody islands of the South Pacific Ocean, about five or six leagues asunder. They were visited in 1767 by captain Carteret. The most southern is of a half-moon shape, low, flat, and sandy, with a reef projecting half a mile from the south end, where the sea breaks violently: its appearance is agreeable, but it affords neither vegetables nor water. There seemed also no traces of inhabitants. Many birds were seen on it, however, and they were so tame, that they readily allowed themselves to be taken. Captain Carteret thought these islands were seen by Quiros, the Spanish navigator, in 1606. One lies in lat.

20° 38′ S., long. 146° W.; the other in lat. 20° 34′ S., long. 146° 15′ W.

Duke of York's Island, an island of the South Pacific Ocean, in St. George's Channel, which divides New Ireland and New Britain. It is situated between Cape Palliser and Cape Stephens, where the strait is about fifteen leagues broad, and has a beautiful aspect, being covered inland with lofty woods, which near the water-side are interspersed with the houses of the natives. Their canoes are very neat. Long. 151° 20′ E., lat. 4° 9′ S.

Duke of York's Island, an island in the South Pacific Ocean, discovered in 1765 by commodore Byron. It is low, and about thirty miles in circumference. There is a large lake in the centre, and the whole island is well wooded. The surf breaks violently round the coast. No inhabitants were seen. Long. 187° 30′ E., lat. 7° 56′ S.

Duke of York's Islands, a cluster of islands off the north-western coast of America. They were first discovered by Vancouver, from whom they received their present name. They extend about fifty miles in length, and twenty-five in breadth. Long. 227° 15′ to 228° 15′ E., lat. 55° 50′ N.

DUKER (Charles Andrew), a celebrated German editor and critic, was born at Unna in Westphalia in 1670. He was educated at the university of Franeker, and appointed professor of ancient history at Utrecht, where he acquired great notice. His works are, Oratio de Difficultatibus Quibusdam Interpretationis Grammaticæ Veterum Scriptorum Græcorum et Latinorum; Sylloge Opusculorum Variorum de Latinitate Jurisconsultorum Veterum; an edition of Thucydides; and an edition of Florus, &c. &c. He died at Meyderick, near Duisbourg in 1752.

DUL'CET, *adj.* DUL'CIFY, *v. a.* DUL'CIMER, *n. s.* DUL'CORATE, *v. a.* DUL'CORATION, *n. s.* Fr. *doucet*, from Lat. *dulcis*, sweet. To dulcify or dulcorate, is to make sweet: dulcimer, an instrument remarkable for its sweet tones.

Ye hear the sound of the cornet, flute, harp, sackbut, psaltery, *dulcimer*, and all kinds of musick. *Daniel* iii. 5.

I sat upon a promontory,
And heard a mermaid, on a dolphin's back,
Uttering such *dulcet* and harmonious breath,
That the rude sea grew civil at her song.
Shakspeare.

The ancients, for the *dulcorating* of fruit, do commend swine's dung above all other dung. *Bacon.*

Malt gathereth a sweetness to the taste, which appeareth in the wort: the *dulcoration* of things is worthy to be tried to the full; for that *dulcoration* importeth a degree to nourishment: and the making of things inalimental to become alimental, may be an experiment of great profit. *Id.*

A decoction of wild gourd, or colocynthis, though somewhat qualified, will not from every hand be *dulcified* into aliment, by an addition of flour or meal. *Browne.*

A fabrick huge
Rose like an exhalation, with the sound
Of *dulcet* symphonies, and voices sweet.
Milton.

In colcothar, the exactest calcination, followed by an exquisite *dulcification*, does not reduce the remaining body into elementary earth; for after the salt of vitriol, if the calcination have been too faint, is drawn out of the colcothar, the residue is not earth, but a mixt body, rich in medical virtues. *Boyle.*

Turbith mineral, as it is sold in the shops, is a rough medicine; but, being somewhat *dulcorated*, first procureth vomiting, and then salivation. *Wiseman's Surgery.*

I dressed him with a pledgit, dipt in a *dulcified* tincture of vitriol. *Id.*

Spirit of wine *dulcifies* spirit of salt; nitre or vitriol have other bad effects. *Arbuthnot on Aliments.*

They to the dome where smoke with curling play
Announced the dinner to the regions round,
Summoned the singer blithe, and harper gay,
And aided wine with *dulcet*-streaming sound.
Dr. Johnson's Poems.

High o'er the chequered vault with transient glow
Bright lustres dart, as dash the waves below;
And echo's sweet responsive voice prolongs
The *dulcet* tumult of their silver tongues. *Darwin.*

So well that thought the' employment seems to suit,
Psaltery and sackbut, *dulcimer* and flute.
O fie! 'tis evangelical and pure:
Observe each face, how sober and demure! *Cowper.*

DU'LIA, *n. s.* Δουλεια. An inferior kind of adoration.

Paleotus saith, that the same worship which is given to the prototype may be given to the image, but with the different degrees of latria and *dulia*. *Stillingfleet.*

DULL, *adj.* & *v. a.* DUL'LARD, *n. s.* DULL'-EYED, *adj.* DULL'-HEAD, *n. s.* DUL'LY, *adv.* DULL'NESS, *n. s.* Got. *dulla*, a fool; Sax. dole; Swed. and Dut. *doll*; Wel. *dwl*; Teut. *duol*; Gr. δουλος, a servant. Tooke says from the Ang.-Sax. dwolian, to thicken. Heavy, thick; stupid; awkward; sad; melancholy; drowsy: as a verb, to make stupid; to blunt; thicken; weaken; damp; make heavy. A dullard, or dullhead, is a blockhead.

This people's heart is waxed gross, and their ears are *dull* of hearing. *Matt.* xiii. 15.

For to illumine she sayd I was to *dulle*
Aduysynge me my penne awaye to pulle. *Skelton.*

Nothing hath more *dulled* the wits, or taken away the will of children from learning, than care in making of Latin. *Ascham.*

This people be fools and *dullheads* to all goodness; but subtle, cunning, and bold in any mischief. *Id.*

Now forced to overflow with brackish tears,
The troublous noise did *dull* their dainty ears.
Spenser.

O help thou my weak wit, and sharpen my *dull* tongue. *Faerie Queene.*

Prayers were short, as if darts thrown out with a sudden quickness, lest that vigilant and erect attention of mind, which in prayer is very necessary, should be wasted or *dulled* through continuance. *Hooker.*

Such is their evil hap to play upon *dull*-spirited men. *Id.*

He that hath learned no wit by nature, nor art, may complain of gross breeding, or comes of a very *dull* kindred. *Shakspeare.*

Borrowing *dulls* the edge of industry. *Id.*

This arm of mine hath chastised
The petty rebel, *dulbrained* Buckingham. *Id.*

I'll not be made a soft and *dull-eyed* fool,
) shake the head, relent, and sigh, and yield
) Christian intercessors. *Id. Merchant of Venice.*

What! mak'st thou me a *dullard* in this act?
'ilt thou not speak to me? *Id. Cymbeline.*

Here cease more questions;
hou art inclined to sleep. 'Tis a good *dullness*,
nd give it way. *Id. Tempest.*

(drunkenness) *dulleth* the spirits, and destroyeth
body as ivy doth an old tree, or as the worm that
ndereth in the kernel of the nut. *Raleigh.*

dull man is so near a dead man, that he is
lly to be ranked in the list of the living; and as
s not to be buried whilst he is half alive, so he is
ttle to be employed whilst he is half dead.
Saville.

'sury *dulls* and damps all industries, wherein
ey would be stirring, if it were not for the slug.
Bacon.

he princess of Germany had but a *dull* fear of the
tness of Spain, upon a general apprehension: now
fear is sharpened and pointed. *Id.*

'ature, by a continual use of any thing, groweth
satiety and *dulness* either of appetite or working.
Id.

he air, if it be moist, doth in a degree quench
flame, and howsoever maketh it burn more *dully*.
Id.

Honours oppress weak spirits, and our sense
trong objects *dull*; the more the less we see.
Donne.

Meeting with Time, Slack thing, said I,
hy scythe is *dull*; whet it, for shame. *Herbert.*

orrection may reform negligent boys, but not
nd those that are insensibly *dull*. All the whet-
in the world can never set a razor's edge on that
ch hath no steel in it. *Fuller.*

O could I flow like thee! and make thy stream
ly great example, as it is my theme;
ho' deep yet clear, tho' gentle yet not *dull*;
trong without rage, without o'erflowing full.
Denham. Cooper's Hill.

Not that I think those pantomimes,
Who vary action with the times,
Are less ingenious in their art
Than those who *dully* act one part. *Hudibras.*

'very man, even the *dullest*, is thinking more than
most eloquent can teach him how to utter.
Dryden.

Shadwel alone my perfect image bears,
Mature in *dulness* from his tender years. *Id.*

t is not sufficient to imitate nature in every cir-
stance *dully*, literally, and meanly; but it becomes
ainter to take what is most beautiful.
Id. Dufresnoy.

o was she *dulled* with all, that we could come so
r as to hear her speeches, and yet she not perceive
hearers of her lamentations. *Sidney.*

Iemory is so necessary to all conditions of life,
we are not to fear it should grow *dull* for want of
'cise, if exercise would make it stronger. *Locke.*

'or is the *dulness* of the scholar to extinguish, but
er to inflame, the charity of the teacher. *South.*

Vhy, how now, Andrew? cries his brother droll;
lay's conceit, methinks, is something *dull*. *Prior.*

Dull rogues affect the politician's part,
nd learn to nod, and smile, and shrug with art.
Congreve.

Whoe'er has travelled life's *dull* round,
Where'er his stages may have been,
May sigh to think he still has found
The warmest welcome at an inn. *Shenstone.*

As turns a flock of geese, and, on the green,
Poke out their foolish necks in awkward spleen,
(Ridiculous in rage)! to hiss, not bite,
So war their quills, when sons of *Dulness* write.
Young.

In England every man may be an author that can write; for they have by law a liberty, not only of saying what they please, but of being as *dull* as they please. *Goldsmith.*

Dullness it is easy to despise, and laughter it is easy to repay. *Johnson. Plan of Dictionary.*

The punch goes round, and they are *dull*
And lumpish still as ever;
Like barrels with their bellies full,
They only weigh the heavier. *Cowper.*

Could thine art
Make them indeed immortal, and impart
The purity of heaven to earthly joys,
Expel the venom and not blunt the dart—
The *dull* satiety which all destroys—
And root from out the soul the deadly weed which
cloys? *Byron.*

DULL, in the manege. The marks of a dull horse, called by the French, marquis de ladre, are white spots round the eye and on the tip of the nose, upon any general color whatsoever. Though some take these spots for signs of stupidity, it is certain they are great marks of the goodness of a horse; and the horses that have them are very sensible and quick upon the spur.

DULSE, or DILLS, a kind of esculent seaweed, eaten by the common people near Edinburgh. See FUCUS, PALMATUS.

DULWICH, a hamlet of Camberwell, five miles from London; celebrated for its college, founded by Alleyn, the actor, in consequence of a supposed apparition of the devil. See ALLEYN. This foundation was endowed for the maintenance of six poor men, six poor women, and twelve poor boys; the latter of whom, when they arrive at a proper age, are either sent to the universities, or apprenticed. This establishment is under the direction of a master (who must always be of the name of Allen), a warden, and four fellows, of whom three must be divines, and the fourth an organist. The master is lord of the manor for a considerable extent; but both he and the warden and fellows must continue unmarried, on pain of exclusion. The building was erected after a design of Inigo Jones, and contains the chapel and master's apartments in front; the chambers for the poor men, women, and boys, are in the wings. The beautiful prospects of this village and its neighbourhood have made it a favorite residence of many gentry and citizens of London.

DULVERTON, a town in Somersetshire, seated on a branch of the Ex; twenty-four miles east of Barnstaple, and 165 west by south of London. It has a market on Saturday, and a manufacture of coarse woollens and blankets. There are some lead mines near the town, but the ore is hard and barren. Market on Saturday, the toll of which is annually distributed to the poor.

DUMAS (Louis), an ingenious Frenchman, was the natural son of Montcalm, lord of Candiac, born at Nismes, in 1676. He was bred to the law, but applied himself to mathematical and mechanical studies. He invented an instru-

ment called the Bureau Typographique, to teach children reading and writing mechanically. He also devised another, for instructing them in music. On both these subjects he wrote explanatory treatises, besides a history of the unfortunate Mary, queen of Scots. He died in 1744.

Dumas (Charles Louis), a French surgeon and anatomist, who suggested considerable improvements in the nomenclature of anatomy. He was professor of the science at Montpelier, where he died in 1814. His works are A Treatise on Mythology, in which is proposed a new mode of classification and denomination of the muscles; and Principes de Physiologie, Paris, 1806, 4 vols. 8vo.

DUMB, *adj.* / DUMB'LY, *adv.* / DUMB'NESS, *n. s.* / DUMB'-FOUND, *v. a.* } Goth. *dumbs*; Saxon, dumb; Dan. *dum*; Belg. and Germ. *stumme*, from Heb. דמם, he was silent. Mute; incapable or deprived of speech: hence silent, refusing to speak. To dumbfound, is to strike dumb.

And the aungel answerde and seyde to him, for Y am Gabriel that stonde nygh bifore God, and Y am sent to thee to speke and to evangelise to thee these thingis, and lo thou schalt be doumbe. *Wiclif.*

It hath pleased himself sometime to unloose the very tongues even of *dumb* creatures, and to teach them to plead in their own defence, lest the cruelty of man should persist to afflict them. *Hooker.*

They spake not a word;
But like *dumb* statues or unbreathing stones,
Stared each on other. *Shakspeare. Richard III.*

There was speech in their *dumbness*, language in their very gesture: they looked as they had heard of a world ransomed or one destroyed. *Id. Winter's Tale.*

Silence in love bewrays more woe
Than words, tho' ne'er so witty;
A beggar that is *dumb*, you know,
May challenge double pity. *Raleigh.*

The tenants wonder at their land-lord's sonne,
And blesse them at so sudden comming on,
More than who vies his pence to view some trick
Of strange Moroccoe's *dumbe* arithmetike.
Bp. Hall. Satires, iv. 2.

His gentle *dumb* expression turned at length
The eye of Eve to mark his play. *Milton.*

Her humble gestures made the residue plain,
Dumb eloquence persuading more than speech.
Roscommon.

'Tis love, said she; and then my downcast eyes,
And guilty *dumbness*, witnessed my surprize. *Dryden.*

For he who covets gain in such excess
Does by *dumb* signs himself as much express,
As if in words at length he showed his mind.
Id. Juvenal.

They had like to have *dumbfounded* the justice; but his clerk came in to his assistance. *Spectator.*

Nothing is more common than for lovers to complain, relent, languish, despair, and die in *dumb* show. *Addison.*

Some positive terms signify a negative idea; blind implies a privation of sight, *dumb* a denial of speech. *Watts's Logick.*

The *dumb* shall sing, the lame his crutch forego,
And leap exulting like the bounding roe. *Pope.*

At length our mighty bard's victorious lays
Fill the loud voice of universal praise;
And baffled spite with hopeless anguish *dumb*,
Yields to renown the centuries to come.
Johnson. Prologue.

Loud when they beg, *dumb* only when they steal.
Cowper.

Unless an instance has occurred of furniture's behaving in a disorderly manner, or a *dumb-waiter's* barking in consequence of the hydrophobia, I conceive such a phrase could not have been introduced. *Sheridan.*

And near, the beat of the alarming drum
Roused up the soldier ere the morning star;
While thronged the citizens with terror *dumb*,
Or whispering, with white lips—'The foe! They come! they come!' *Byron.*

Dumbness. The most general, if not the sole cause of dumbness, is the want of the sense of hearing. The use of language is originally acquired by imitating articulate sounds. From this source of intelligence, deaf people are excluded: they cannot acquire articulate sounds by the ear: unless, therefore, articulation be communicated to them by some other medium, these unhappy people must for ever be deprived of the use of language. Deafness has in all ages been considered as such a total obstruction to speech or written language, that an attempt to teach the deaf to speak or read was uniformly regarded as impracticable, till Dr. Wallis and some others showed that although deaf people cannot learn to speak or read by the direction of the ear, there are other sources of imitation, by which the same effect may be produced. The organs of hearing and of speech have little or no connexion. Persons deprived of the former generally possess the latter in such perfection, that nothing further is necessary, in order to make them articulate, than to teach them how to use these organs. This indeed is no easy task; but experience shows that it is practicable.

The late Mr. Thomas Braidwood, was perhaps the first who ever brought this surprising art to any degree of perfection. He began with a single pupil in 1764; and, since that period, has taught great numbers of people born deaf to speak distinctly; to read, to write, to understand figures, the principles of religion and morality, &c. and even to make a rapid progress in those useful branches of education. Mr. Braidwood's principal difficulty, after he had discovered this art, was to make the public believe in the practicability of it. He advertised in the public papers; he exhibited his pupils to many noblemen and gentlemen; still he found the generality of mankind unwilling to receive his discoveries.

The first effort in this method is, to teach the pupil to pronounce the simple sounds of the vowels and consonants. He would pronounce the sound of *a* slowly, pointing out the figure of the letter at the same time, and making the pupil observe the motion of his mouth and throat, anxiously imitating him all the while, though at first at a loss to understand what he would have him do. In this manner he proceeded till the pupil had learned to pronounce the sounds of the letters. He went on in the same manner to join a vowel and a consonant, till at length the pupil was enabled both to speak and read. That his pupils were taught not only the mere pro-

unciation, but also to understand the meaning f what they read, was easily ascertained by a onversation with any of them. Of this Mr. 'ennant gives a remarkable instance in a young idy of about thirteen years of age, who had een some time under the care of Mr. Braidwood. he read, she wrote well, says that writer, her eading was not by rote. She could clothe the ame thought in a new set of words, and never ary from the original sense.

A new and different method, equally laborious nd successful, was practised by the abbé de 'Epée, of Berlin. He began not by endeavour- ng to form the organs of speech to articulate ounds, but communicating ideas to the mind y means of signs and characters: to effect this, e wrote down the names of things; and, by a egular system of signs, established a connexion etween these words and the ideas to be excited y them. After he had thus furnished his pupils ith ideas, and a medium of communication, he ught them to articulate and pronounce. In is manner he enabled one of his pupils to eliver a Latin oration in public, and another to efend a thesis against the objections of one of is fellow-pupils in a scholastic disputation; but does not appear that the abbé taught his upils to understand what was spoken. There perhaps no word, says the abbe, more difficult explain by signs than the verb croire, 'to elieve.' To do this, he wrote the verb with its ignifications in the following manner:—

Je crois	Je dis oui par l'esprit, Je pense que oui.
	Je dis oui par le coeur, J'aime a penser que oui.
	Je dis oui par la bouche.
	Je ne vois pas des yeux.

fter teaching these four significations by as any signs, he connected them with the verb, nd added other signs to express the number, erson, tense, and mood, in which it is used. If the four signs, corresponding with the lines bove mentioned, he added that of a substantive, he pupil will write the word foi, 'faith;' but, a sign, indicating a participle used substan- ively, be adjoined, he will express la croyance, belief;' to make him write croyable, 'credible,' he four signs of the verb must be accompanied ith one that indicates an adjective terminating able: all these signs are rapidly made, and mmediately comprehended. M. Linguet, a ember of the Royal Academy, having asserted at persons thus instructed could be considered s little more than automata, the abbé invited im to be present at his lessons, and expressed is astonishment, that M. Linguet should be so rejudiced in favor of the medium by which e had received the first rudiments of knowledge, s to conclude that they could not be imparted y any other; desiring him, at the same time, reflect, that the connexion between ideas and he articulate sounds by which they are excited the mind, is not less arbitrary than that be- ween these ideas and the written characters hich are made to represent them to the eye. M. Linguet complied with the invitation; and he abbé having desired him to fix on some bstract term, which he would by signs com- municate to his pupils, he chose the word un- intelligibility; which, to his astonishment, was almost instantly written by one of them. The abbé informed him, that to communicate this word he had used five signs, which, though scarce- ly perceivable to him, were immediately and dis- tinctly apprehended by his scholars: the first of these signs indicated an internal action; the second represented the act of a mind that reads internally, or, in other words, comprehends what is proposed to it; a third signified that such a disposition is possible; these, taken together, form the word intelligible: a fourth sign trans- forms the adjective into the substantive; and a fifth, expressing negation, completes the word required. M. Linguet afterwards proposed this question, What do you understand by metaphy- sical ideas? which being committed to writing, a young lady immediately answered on paper in the following terms: 'I understand the ideas of things which are independent of our senses, which are beyond the reach of our senses, which make no impression on our senses, which can- not be perceived by our senses.'

In the Ephemerides of the Curious, we have an account of a periodical dumbness, which had continued for more than fifteen years, and had not gone off at the time the account was written. The person was son to an inn-keeper at Jesing, in the duchy of Wirtemberg. He was one night taken so ill after supper, that he could neither stand nor sit. He continued, for about an hour, oppressed with sickness, to such a de- gree as to be in danger of suffocation. At the expiration of this time he grew better; but, during three months, he was much dejected, melancholy, and, at times, fearful. He was then suddenly struck dumb, and became unable to pro- nounce the least word, or form the least sound, though he could speak very articulately before. The loss of speech was at first instantaneous, and continued only a few minutes: but the duration of it began to lengthen every day; so that it soon amounted to half an hour, two hours, three hours, and at last to twenty-three hours, yet without any order. And at last the return of speech kept so constant and regular an order, that, for fourteen years together, he could not speak except from noon, during the space of one entire hour, to the precise moment of one o'clock. Every time he lost his speech, he felt something rise from his stomach to his throat. Excepting this loss of speech, he was afflicted with no other disorder of any animal function. Both his internal and external senses continued sound; he heard always perfectly well, and answered the questions proposed to him by gestures or writing. All suspicion of deceit was removed by his keeping exactly the same hour, though he had no access to any instruments by which time can be measured.

Modern researches into this curious and in- teresting topic, instigated mainly, perhaps, by the efforts of the abbé de l'Epee, have made us better acquainted both with the few historical facts that belong to the subject, and with the ac- tual faculties possessed by the dumb. In this country, in particular, the art of instructing these unhappy persons has been cultivated, of late years, with great success.

Aristotle notices, Hist. An. iv. 9, that deafness produces dumbness, but speaks of no remedy for this calamity. Pliny, who quotes the learned Stagirite on this subject, mentions a young painter, Q. Pedius, xxxv. 7, who was born deaf and dumb; but through the care of a kinsman in his education, he attained considerable eminence in his art. The first person who is recorded to have made any systematic attempts to instruct the deaf and dumb, is Pedro de Ponce, a Benedictine monk of Sahagen, in Spain. He died in 1584. The earliest publication on this subject, is a Spanish work of the early part of the seventeenth century, 1620, Reduction de las Letvas, y Arte pava ensenar à hablar los Mudos, written by the then secretary to the constable of Castile, Bonet. A brother of the constable having been born deaf, was likewise dumb, and Bonet was one of his tutors. But Sir Kenelm Digby, who saw the former in the course of his travels, ascribes the faculty he possessed of understanding conversation, to the successful efforts of an ecclesiastic. 'There was a priest,' he says, 'who undertooke the teaching him to understand others when they spoke, and to speake himselfe that others might understand him, for which attempt at first he was laughed at; yet, after some yeares he was looked upon as if he had wrought a miracle. In a word, after strange patience, constancie, and paines, he brought the young lord to speak as distinctly as any man whatsoever, and to understand so perfectly what others said, that he would not loose a word in a whole day's conversation. I have often discoursed with the priest whilst I waited upon the prince of Wales, now our gracious sovereign, in Spaine, and I doubt not but his majesty remembreth all I have said of him, and much more; for his majesty was very curious to observe and inquire into the utmost of it. He could discern in another whether he spoke shrill or low; and he would repeat after any body any hard word whatsoever, which the prince tried often, not onely in English, but by making some Welshmen that served his highnesse, speak words of their language, which he so perfectly echoed, that I confesse I wondred more at that than at all the rest, and his master himselfe would acknowledge, that the rules of his art reached not to produce that effect with any certainty. And therefore concluded, this in him must spring from other rules he had framede unto himself out of his attentive observation, which the advantages which nature had justly given him in the sharpnesse of senses to supply the want of this, endowed him with an ability and sagacity to do beyond any other man that had his hearing. He expressed it surely, in a high measure, by his so exact imitation of the Welsh pronunciation, for that tongue, like the Hebrew, employeth much the guttural letters, and the motion of that part which frameth them cannot be seen or judged by the eye, otherwise than by the effect they may happily make by consent, in the other parts of the mouth exposed to view! For the knowledge he had of what they said, sprung from his observing the motions they made, so that he could converse currently in the light, though they he talked with whispered never so softly; and I have seen him, at the distance of a large chamber's breadth, say words after one, that I, standing close by the speaker, could not hear a syllable of.'

The next writer on the subject was Dr. John Bulwer, 'surnamed,' as he tells us, 'the Chirosopher,' in 1648. His tract was entitled, Philocophus, or the Deafe and Dumbe Man's Friend, 'exhibiting the philosophicall verity of that subtle arte which may inable with an observant eie to heare what any man speaks by the moving of his lips. Upon the same ground, with the advantage of an historicall exemplification, apparently proving that a man borne deafe and dumbe may be taught to heare the sound of words with his eie, and hence learne to speake with his tongue.' This writer was tutor to Sir Edward Gastwicke of Wellington, in Bedfordshire, and Mr. William Gastwicke his youugest brother, who were both dumb. He also published, in 1644, Chirologie, or the Natural Language of the Hand; and Chironomia, or the Art of Manuel Rhetorique. In 1670 Dr. Wallis inserted a Letter to Mr. Boyle on this subject, in the Philosophical Transactions; and another in 1698. It is also noticed by him incidentally in his Grammatica Lingua Anglicana; and a treatise prefixed to it, De Loquelâ, seu de Sonorum omnium Loquelarium Formatione. In the Philosophical Transactions for January, 1668, an account is given of a tract published the preceding year by a M. Helmet, of Salzburgh, entitled Alphabetum Naturæ.

Dr. Holder's Elements of Speech appeared in 1669, with an appendix expressly concerning persons deaf and dumb, and containing an account of his successful endeavours to teach Mr. A. Popham, a dumb son of colonel Popham, to speak. He was one of those persons who could hear a softer sound when the action of the tympanum was excited by a loud one. Dr. Holder first taught him to write, and then showed him the motion of the lips necessary to pronounce each separate letter. Dr. Wallis had been successful a little earlier in the education of a youth similarly circumstanced, the son of the mayor of Northampton. In the course of a year this youth conld read 'a great part of the English Bible, and had attained so much skill as to express himself intelligibly in ordinary affairs; to understand letters written to him, and to write answers to them, though not elegantly, yet so as to be understood.' In the presence of many foreigners, 'who out of curiosity had come to see him,' as well as before the court and the royal family, he had 'often not only read English and Latin, but pronounced the most difficult words of their language, even Polish itself, which they could propose to him.' Young Popham was afterwards removed to the care of Dr. Wallis; and this circumstance, together with what Dr. Holder thought an unfair passage in one of Dr. Wallis's publications, produced a controversy between these writers, to be found in the Philosophical Transactions, 1670. In Transactions, 1698, p. 353, Dr. Wallis enters fully into his own plans, to which, it is contended by some writers, that no material addition has been since made.

We ought not here, perhaps to omit noticing the early and scarce tract of George Dalgarno, a Scottish schoolmaster, entitled Didascalocophus, or the Deaf and Dumb Man's Tutor, which was

printed in a small volume at Oxford, in 1680. His design he states to be, 'to bring the way of teaching a deaf man to read and write, as near as possible to that of teaching young ones to speak and understand their mother tongue.' 'In prosecuting this general idea,' says Mr. Dugald Stewart, 'he has treated in one short chapter, of a Deaf Man's Dictionary; and, in another, of a Grammar for Deaf Persons; both of them containing a variety of precious hints, from which useful practical lights might be derived by all who have any concern in the tuition of children during the first stage of their education.' See Mr. Stewart's Account of a Boy born Blind and Deaf, Transactions, Royal Society edition, vol. VII. Dalgarno had, twenty years before, given to the world a very ingenious piece, entitled Ars Signorum, from which, says Mr. Stewart, it appears indisputably that he was the precursor of bishop Wilkins in his Speculations concerning 'a real character, and a philosophical language'. 'That Dalgarno's suggestions, with respect to the education of the dumb,' adds Mr. Stewart, were not altogether useless to Dr. Wallis, will be readily admitted by those who take the trouble to compare his Letter to Mr. Beverly, published eighteen years after Dalgarno's Treatise, with his Tractatus de Loquela, published in 1653. In this letter some valuable remarks are to be found on the method of leading the dumb to the signification of words; and yet the name of Dalgarno is not once mentioned to his correspondent.'

More recent professors of this useful art have been Father Vannin and Mons. Perreize, of Paris; Mr. Heinich, of Leipsic; Mr. Baker, of London; and Mr. Braidwood, of Edinburgh; the abbé de l'Epée; and his successor the abbé Sicard; Dr. Watson, formerly the assistant of Mr. Braidwood; and Mr. Young, of Peckham.

We have noticed the plans of Mr. Braidwood and the abbé de l'Epée. The latter, in the last years of his life, relinquished an object upon which he employed considerable pains at the commencement of his career, viz. teaching the dumb to use articulate sounds: the abbé Sicard, down to the year 1815, also abandoned every attempt of this kind.

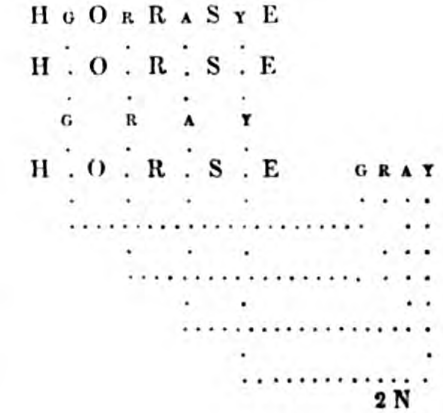
In England and Scotland this has been a favorite point with professors, and Dr. Watson speaks decidedly of its utility, as multiplying the means of association, whereby the dumb, like all other persons, retain and digest ideas. He informs us that he constantly found deaf persons who had learnt to articulate, speaking softly to themselves; and rehearsing words or sentences, either for the purpose of better remembering them, or of framing such expressions as would best convey their ideas. This appears very important; and we understand that the abbé Sicard, since his visit to England in the year above named, has resumed the abbé de l'Epée's original plan.

This gentleman is at the head of the continental system of employing artificial signs for the impression of ideas, or a set of conventional gestures prescribed by the teacher in the education of the dumb. In his first lessons he endeavours to teach his pupil the relation between the names of objects and the objects themselves; the analysis of words into the letters of the alphabet; and the particular gesture which he is to attach to each word. He now explains the meaning of collective words, as distinguished from those denoting individual objects or parts of objects. Then he proceeds to general terms, applicable in common to a number of individuals, and to generic names comprehending a number of species; and lastly, to the most general and abstract words, such as being, thing, object. The accidents, modifications, and variations of objects, as denoted by adjectives, are next taught. He first endeavours to make his pupil conceive these qualities as inherent in the objects themselves, and next as being capable of being detached by a mental operation. For instance, taking several pieces of paper, each white on one side, and colored on the other with a common color, he places them on a table, before a black board, with their white sides uppermost. He then proceeds to inscribe some familiar word, like HORSE, on the board, leaving sufficient intervals between the letters for the insertion of other letters. Then turning the sheet painted gray, so that the colored side is now uppermost, he writes the word GRAY between the letters of the former word, but in smaller characters, thus,

H G O R R A S Y E.

This is done successively with regard to the other sheets of paper, inserting the name of its respective color between the letters of the word HORSE, which is repeated for that purpose. The gray sheet is again turned down, so that its white side is presented; upon which the smaller letters, composing the word *gray*, are effaced, while the great letters, H, O, R, S, E, are allowed to remain. Thus the pupil is taught to consider the quality as part of the object, or as inherent in it. In like manner, he proceeds with other adjectives, such as round, square, &c., expressing the form of objects; writing them in the intervals of the letters composing the name of the respective objects; effacing them, and substituting others in succession.

To lead the pupil to form the abstraction of the quality thus expressed, that is, to the use of the adjective as a separate word that may be applied to different substantives, he employs the following diagram, the different lines of which he traces before his eyes, in order to point out the steps by which he is to arrive at this notion.



Thus obtaining separately, the two words, he afterwards unites them by a connecting line, thus:

HORSE—GRAY

In order to form this into a sentence, he inserts the word *is*, instead of the line; of which it may accordingly be regarded as the substitute, thus:

HORSE IS GRAY.

Thus by making his pupils understand the nature of a verb, and afterwards teaching them that the verb can express either an existence or an action, *past*, *present*, or *future*, he leads them to the system of conjugation, and to all the shades of tenses. The varieties of significations, and of pronouns, with the corresponding affections of verbs, in regard to number and person, are conveyed by contrivances analogous to the preceding. They proceed upon the principle of connecting together words by lines, denoting the ideas, which are the component parts of other ideas; and writing in the place where the lines unite, or in place of the other words in a similar diagram, the name of the compound idea.

Mr. Sicard also employs a system of cyphers, written on the top of every word or member of a sentence, according to the office it performs in the sentence; by the help of which his pupils are better enabled to analyse it into its parts, distinguishing the name of the object, which is either acting or receiving an action, the verb and its regimen, direct, indirect, or circumstantial; and displaying in a similar way every part of speech.

The mere child, while learning written words, is made to copy them himself, so that, by dwelling upon their forms sufficiently, they make a strong impression on his mind. Then from time to time he is shown the objects, and required to write their names himself: and in these preliminary lessons, much assistance is derived from drawings of the objects. The abbé Sicard has availed himself, with much ingenuity, of this mode of denoting them. He begins, for instance, by tracing the outline of a familiar object, such as a key, on a black board, with a chalk pencil; and placing the object itself before the eye of the pupil, he readily understands the resemblance of the design with what it is meant to represent. He does the same with other objects; and exercises his pupil in pointing out the objects denoted by each drawing, which of course is an amusement to him. He next writes the name of each object within the outline of the figure on the board; and after effacing the outlines, so that nothing but the words remain, signifies to the pupil that he is still to consider what he now sees as the representation of the drawing, that is, of the object denoted. Dr. Watson has had a set of plates engraved, containing delineations of 600 objects most generally met with. These are annexed to his book of Instruction of the Deaf and Dumb, in eighty octavo pages, and accompanied by a printed vocabulary, consisting of the names of all the objects represented, as also of most of the words explained in the earlier lessons, before the engravings are had recourse to. The first time of going through this vocabulary, the heads or generic names under which the objects are classed are not regarded. But, in subsequent lessons, these are particularly attended to, and their relations to the subordinate specific names explained.

It is also found extremely advantageous to instruct the pupil, as soon as he is familiar with the use of letters, in the manual alphabet, as it is called; or the expression of letters by different positions of the fingers. This is not only a very quick and ready means of communication commonly learned at other schools; but easily retained, or recovered if lost, and it furnishes an excellent substitute for the pencil, or pen and ink, when those materials are not at hand. The dumb, when properly instructed, converse thus together with the utmost rapidity.

Another mode of yet quicker intercourse has also been devised for the dumb. It is that of writing the forms of the letters by the point of the finger in the air, and on various prominent parts of the body, as the back for instance. It must, however, be recollected that, to a spectator, who stands before us, writing in the air would appear reversed, if traced in the ordinary manner, and this must be remedied by the letters being written in a reversed form, a method which is said to be easily acquired by practising before a looking-glass. For the particulars of Dr. Watson's course we must refer to his Instruction of the Deaf and Dumb, by Joseph Watson, LL.D, 2 vols. 8vo. London, 1809.

A singular example of a child being born deaf and blind, has recently occurred in the person of James Mitchell, whose history has been narrated by Mr. Dugald Stewart, in a memoir published in the Transactions of the Royal Society of Edinburgh, Vol. VII. p. 70. The celebrated Mr. Wardrop, performed upon him the operation of couching, and has also given us some valuable and interesting particulars of his case, in a separate work, entitled History of James Mitchell, a Boy, born Blind and Deaf, with an Account of the Operation performed for the Recovery of his Sight. Lond. 4to. 1813. In the eighth volume of the Transactions of the Royal Society of Edinburgh, are to be found Additional Communications respecting the Blind and Deaf Boy, James Mitchell, by the late Dr. John Gordon; a gentleman who had paid particular attention to the case of Mitchell, and from whom Mr. Stewart acknowledges he received much information. The volume also contains a paper on the Education of James Mitchell, by Dr. Dewar.

An Asylum for Educating the Deaf and Dumb Children of the Poor, was established in the neighbourhood of London, in the year 1792, and is now under the superintendance of Dr. Joseph Watson, to whose work we have alluded. No child is admitted under the age of nine years, and fourteen is the earliest age at which they can be apprenticed.

In a report, issued in July 1820, by the committee appointed for managing this establishment, the subscribers are informed that the admissions, on the average, have amounted to between forty and fifty within each year; yet the applications have much increased. At the election, in Ja-

nuary, 1820, a list of ninety-five candidates was presented to the governors, out of which they were under the painful necessity of electing only twenty-five, though all seemed to have powerful, if not equal, claims to their notice. An examination of this report will show that a defect in the organs of hearing is a misfortune of much more frequent occurrence than is generally imagined. From a statement given by the committee, the public will see that among those who have applied to this charitable institution for relief are to be found twenty-four families, which contain no fewer than eighty-seven children deaf and dumb. We shall extract some of their names.

William Coleman, with eleven children, of whom five are deaf and dumb.

David Thomson, with ten children, five deaf and dumb.

George Franklin, with eight children, five deaf and dumb.

Silas Vokins, with seven children, five deaf and dumb.

Fourteen families, with three children, in each, deaf and dumb.

The greater number of the successful applicants for admission into this asylum are natives of the metropolis, or of the adjoining counties only.

Similar institutions have been established at Birmingham and Edinburgh. In the latter, besides the ordinary branches of education, a certain number of boys are taught the trade of shoemaking; and some profit arises from the sale of articles manufactured by them.

At the Asylum for the Deaf and Dumb at Paris, under the management of the abbé Sicard, the apprenticeship of such as are designed for trades begins on their first entering the institution, under the inspection of ten different masters, viz. 1. a printer; 2. an engraver of precious stones; 3. a copper-plate engraver; 4. a drawing master; 5. a turner; 6. a Mosaic artist; 7. a tailor; 8. a shoemaker; 9. a cabinet-maker; 10. a gardener. These masters reside in the asylum, and receive their board and a regular salary. Public exercises, which the abbé Sicard gives once or twice a month, are meant to excite emulation among the pupils, and to make the establishment known.

Institutions formed upon a similar model have been established in Holland, Germany, Russia, and Sweden.

It has been suggested that a very competent share of instruction may be imparted to a deaf and dumb pupil by any teacher who undertakes the task with the talents and temper of an ordinary schoolmaster, and the art of instructing the infant deaf and dumb; by John Panncefort Arrowsmith, 8vo. Lond. 1823, offers some considerable encouragement to this attempt. The editor's brother, now an artist of considerable merit, was at an early age sent, like other boys, to a common school; with a request, on the part of his mother, that he might be treated, in every respect, like the other children. The worthy old dame to whom he was sent, exclaimed, 'How can he be taught his letters? He cannot hear.' 'True,' replied his mother, 'he cannot hear, but he can see. As you can do nothing with the ear, try what can be done with the eye. If he cannot make out the difference between the sound of *a* and that of *b*, you will acknowledge that he is as competent as any other child to distinguish the form of one from that of the other.' And this expectation was soon proved to be correct, to the astonishment of those who ridiculed the idea; 'for in a very little time he knew the twenty-six letters, large and small, as well as any child in the school.' Then vanished all the difficulty; the dame and her wondering neighbours began to see, as his mother had predicted, that he would 'learn by the window, his eyes, as well as any other child could by the door, his ears.' 'At this school,' proceeds Mr. Arrowsmith, 'every child went up to his governess twice in the morning and afternoon. By constantly going up in the same manner, to look at the letters, he soon observed the difference between himself and the other children, by taking notice of their mouths; so that, at length, when the letters were pointed out to him for observation, he looked up to the governess, as much as to say, what is it? She endeavoured to gratify his curiosity, and called the letters by their names as she pointed to them; and in a few months he learnt to pronounce the alphabet, in his own way, which he does to this day.' The moment he convinced his mother that he knew every letter, she got several sets of alphabetical counters, large and small, with which he was exercised, and taught the name of every thing he could see at home and at school. By these means he constantly gained information from his school-fellows without the knowledge of his mistress.

'To those who are still incredulous, and feel an interest in the subject,' says an able writer in the Quarterly Review, 'we earnestly recommend the account which Mr. Arrowsmith gives of the plan adopted in educating his brother. And to render their conviction more certain—let them try the plan which he details. There are few neighbourhoods in which, unfortunately, a subject may not be found for such a purpose. Let him be regularly sent to any village school with other children. Let him be treated, in all respects, like them, and we venture to predict that it will be even impossible to prevent him from acquiring the knowledge of a medium which may enable him to converse with his youthful associates. The mind is fully as active and vigorous in the one as it is in the other; and the curiosity of a deaf and dumb child, being strongly excited by the objects which attract his attention, he can hardly fail to devise some means of obtaining from his companions the information which he wishes to procure.

'We are perfectly convinced that the deaf and dumb might be admitted, with peculiar advantages, into seminaries in which children who hear and speak receive their instruction. The efforts which would be made by the latter class of pupils to explain their ideas to their less fortunate associates would, in the end, prove highly beneficial even to themselves. It is well known that children frequently acquire a knowledge of words without comprehending the ideas of which they are representatives. A constant association with

the deaf and dumb, would impose upon them the necessity of acquiring a precise conception of the words which they used, for the purpose of making them intelligible to their young companions. The advantages which would, inevitably, result from this admixture would be, therefore, mutual, and would much more than counterbalance any imaginary excess of skill which a teacher who confines himself to the sole instruction of the deaf and dumb may be supposed to possess. The admission of deaf and dumb pupils into establishments now exclusively devoted to the reception of those who can hear and speak, could, by no possibility, retard the progress of the latter, while it would greatly facilitate the instruction of the former. Were the intercourse of the deaf and dumb to be confined, in after-life, to persons laboring under a similar misfortune, separate establishments for their education would be recommended by reasons much more cogent than any which can be urged in their favor, while it is remembered that, when they leave these institutions, they must converse principally, if not exclusively, with persons who hear and speak.'

DUMFRIES, or DUMFRIES-SHIRE, a county in the south of Scotland, comprehending the district of Nithsdale, the stewartry of Annandale, and the lordship of Eskdale, extending in length from north-west to south-east about sixty miles, and about thirty miles in breadth where broadest. It is bounded on the south-west by Galloway and part of Kyle: on the north-east by the counties of Roxburgh, Selkirk, and Peebles; on the north-west by Clydesdale; and on the south-east by Solway Frith and the marshes between Scotland and England. A great part of the county is mountainous, overspread with heath, and well stocked with game of all kinds: but the valleys, through which the Esk, the Annan, the Nith, and other smaller rivers run, are extremely pleasant; and some of them well cultivated and very fertile, producing oats, barley, and wheat, in abundance, both for exportation and home consumption; while the mountainous parts afford pasture for innumerable flocks of sheep and herds of black cattle, many thousands of which are annually exported to England. In the valleys are several natural woods and some extensive plantations of different kinds of timber. In Nithsdale, are the rich lead mines of Wanlockhead, the coal mines of Sanquhar and Cairnburn, the inexhaustible lime quarries of Closeburn and Barjarg, and freestone in almost every parish. Annandale has the rich lime quarries of Kellhead and Comtongan, with plenty of free stone near the towns of Annan and Lochmaben: and in the lower part of Eskdale are limestone and coal in abundance. In some places there are indications of iron; copper is wrought; and in Westerkirk is a valuable mine of antimony. Besides the mineral springs of Moffat and Hartfell Spa, there are a great many wells which contain metallic or mineral impregnation. This county contains four royal boroughs, Dumfries, Sanquhar, Annan, and Lochmaben, several small towns and villages, and is divided into forty-two parochial districts, containing in all about 55,000 inhabitants. It sends one member to parliament. The manufactures of Dumfries shire are not very extensive. Cotton-spinning is carried on at Langholm and Annan, and also cotton-weaving at the latter place; a small iron-work has been erected at Kirkconnel; a paper-mill, two small foundries, and several breweries and tan-works at Dumfries, and a carpet manufactory near Sanquhar. Salt was formerly made from sleech, in the parishes of Cummertrees and Ruthwell, without paying duty, in consequence of an act of 1671; but the right to this exemption has been lately questioned. In 1809 the entries inwards to this county were 493 vessels, carrying 1339 men, and 18,985 tons; and 287 vessels cleared outwards, with 802 men, and 12,090 tons. Most of the inward vessels are laden with coal, and of the outward with grain. But its most valuable exports are cattle, sheep, bacon, and wool; almost all of which, excepting the last, are sent out of it by land.

DUMFRIES, the capital of the above county, is a handsome town, situated on a ridge or rising ground, on the north-east side of the river Nith, about nine miles above its junction with the Solway Frith. Its present name appears to have been derived partly from its situation, and partly from the monastery of grey friars, that formerly stood near the head of the street, being only a corruption of Drum friars, or 'the eminence of the friary;' and accordingly, till within these eighty or a hundred years, it was always spelt Drumfries. Besides the pleasantness of its situation, on the side of a beautiful winding river, it is surrounded on all sides with one of the finest and best cultivated sheets of dale country that are any where to be met with; and the prospect from it is terminated, at the distance of a few miles, by a continued chain of hills, forming altogether one of the grandest natural amphitheatres perhaps in Britain. On the north-east side of it, at some little distance, are the ruins of a chapel built by king Robert Bruce. Dumfries appears to have been erected into a royal borough before the middle of the eleventh century, as a grave-stone was discovered some time ago bearing the date of 1079, and mentioning the person buried under it to have been a merchant and burgess of the town. And that it was a place of consequence in the beginning of the fourteenth century, is evident, from the circumstance, that Edward II. called the estates of Scotland to meet there in 1307. In the above-mentioned monastery, too, king Robert Bruce killed his rival, Cumming, lord of Badenoch, with the assistance of James Lindsay and Roger Kirkpatrick, on the 5th February, 1305. The houses of Dumfries are well built and commodious; the principal street extends three quarters of a mile, the whole length of the town, in a direction parallel to the Nith; and the town in general is well paved. It has two very elegant churches and an episcopal chapel, a strong prison, a hospital, an infirmary, and a narrow bridge of nine arches over the river, said to have been built by one of the three daughters and co-heiresses of Alan, lord of Galloway. The assizes for the county, and for the shire of Galloway and stewartry of Kirkcudbright, are held in the town twice a year. It is also the place for holding the sheriff's and commissary courts,

ie quarter-sessions of the peace, and the courts f the commissioners of supply. It is governed y a provost, three bailies, a dean of guild, reasurer, and twelve merchant councillors, with ie deacons of the incorporations. The corpo- ation obtained from king James I., in one of is journeys to England, a small silver tube, ke a pistol barrel, called the silver gun, with is royal license to shoot for it every year; a stival which is still kept up. The town has a eekly market on Wednesday, with two fairs in ebruary and September, at which vast numbers f horses and black cattle are sold. Dumfries es thirty miles W.N.W. of Carlisle, and venty-two S.S.W. of Edinburgh.

DUMFRIES, a town of the United States, the pital of Prince William county, in Virginia. is a port of entry and post town, and has an piscopal church and court house. It lies n the north side of Quantico Creek, ten miles om Colchester, twenty-eight north by east Fredericsburg, and 185 south-west of Phila- lphia.

DUMONT (John), baron of Carlscroom a olitical and historical writer, who became a re- gee in Holland on account of religion, and as made historiographer to the emperor of Ger- any. He died in 1726, leaving behind him veral works, valuable for the facts they contain, , Mémoires Politiques, pour servir a l'Intelli- nce de la Paix de Ryswick, 4 vols. 12mo., 99; Voyages en France, en Italie, en Malte, et Turquie, 4 vols. 12mo., 1699; Corps Univer- l Diplomatique du Droit des Gens, 8 vols. fol. 26; Lettres Historiques depuis Jauvier 1652 squ'en 1710.

DUMOURIEZ (Charles Francis Duperier), noble but reduced family, was born in rovence, January 25th, 1739. He entered into e French military service at the age of eigh- en, against the same duke of Brunswick whom, ter a lapse of many years, he compelled to tire from France. Having, in his twenty- cond year, obtained the rank of captain, and e cross of St. Louis, he went on his travels, id among other countries visited Portugal, of hich kingdom he published an account in 1767. on after this he was employed in Corsica, with e rank of colonel. In 1770 he was sent to land to assist the confederates. He was next gaged on a mission to Sweden, but was com- itted in 1773 to the Bastile, from whence he as released on the death of Louis XV. During e American war he was much employed at herbourg, of which place he was made com- andant. At the commencement of the revolu- on he distinguished himself as a patriot, was ised to the rank of lieutenant-general, and ade minister of foreign affairs. When the russians, 100,000 strong, advanced on France, dispersed them with a very inferior force, rough the superiority of his tactics. The ittle of Jemappe shortly after consolidated his iumph, and revolutionised Belgium. On his turn to Paris, he found the trial of the king as in progress; and, becoming suspected of tachment to that unfortunate prince by the rrorists, he soon retired, and replaced himself the head of his army. He now concluded a treaty with the prince of Saxe Coburg for the evacuation of Belgium, while he himself determined to lead his troops to Paris, and re-establish the constitution of 1791. Coburg promised, if necessary, to furnish an auxiliary force, but the design was frustrated by some of the subordinate generals conveying intelligence of it to the convention. Commissioners were sent to arrest Dumouriez, when he took the decisive step of instantly arresting them, and handing them over to the custody of the enemy, as hostages for the safety of the king and his family. Finding insubordination now beginning to show itself among his troops, he resolved on quitting them, and repaired for refuge to the head-quarters of the prince of Coburg, who offered him a command, but he declined it, and retired to Switzerland. The cantons were however too near to France to render that country a safe asylum, especially as the sum of 300,000 francs was offered for his head. He afterwards retreated to Hamburgh and to England, where he for some time subsisted on a pension of 400 louis, granted him by the landgrave of Hesse Cassel. He survived the restoration of the Bourbon dynasty several years. In 1821 he published two memoirs, addressed to the Greeks, and died in his eighty-fifth year, at Turville Park, near Henley-upon-Thames, March 14th, 1823.

DUMP, *n. s.* } Dutch *dom;* Dan. *dum;*
DUMP'ISH, *adj.* } Goth. *domp;* perhaps from
DUMP'LING, *n. s.* } dumb. Sorrow; sadness:
DUMP'Y, } hence, first a melancholy tune or air; and then any tune. The Scottish dumpy, according to Dr. Jamieson, signifies short and thick: a dumpling is a dumpy pudding.

New year, forth looking out of Janus' gate,
Doth seem to promise hope of new delight;
And bidding the' old adieu his passed date
Bids all old thoughts to die in *dumpish* spight.
Spenser.

Sing no more ditties, sing no more
Of the *dumps* so dull and heavy;
The frauds of men were ever so,
Since summer first was leafy.
Shakspeare. Much Ado About Nothing.

Visit by night your lady's chamber window
With some sweet consort; to their instruments
Tune a deploring *dump:* the night's dead silence
Will well become such sweet complaining grievance.
Shakspeare.

Funerals with stately pomp
March slowly on in solemn *dump.* *Hudibras.*
Pudding and *dumpling* burn to pot. *Dryden.*

This shame *dumps* cause to well-bred people, when it carries them away from the company. *Locke.*

The squire who fought on bloody stumps,
By future bards bewailed in doleful *dumps.*
Gay's Pastoral.

The life which I live at this age is not a dead, *dumpish*, and sour life; but cheerful, lively, and pleasant.

She, in sooth,
Possessed an air and grace by no means common:
Her stature tall—I hate a *dumpy* woman. *Byron.*

DUN, *adj.* Sax. dun; Goth. *dauckn;* Welsh *dwnn;* Belg. *dunker.* A dark tawny color: hence dark, gloomy, in a figurative sense.

Come, thick night!
And pall thee in the *dunnest* smoke of hell.
Shakspeare.

He then surveyed
Hell and the gulph between, and Satan there
Coasting the wall of heaven on this side,
In the *dun* air sublime. *Milton. Paradise Lost.*

The cattle droop, and o'er the furrowed land,
Fresh from the plough, the *dun*-discoloured flocks
Untended spreading crop the wholesome root.
Thomson.

Oh send them to the sullen mansions *dun*,
Her baleful eyes where sorrow rolls around;
Where gloom-enamoured mischief loves to dwell,
And murder, all blood-boltered, schemes the wound. *Dr. Johnson's Poems.*

It changed of course; a heavenly cameleon,
The airy child of vapour and the sun,
Brought forth in purple, cradled in vermillion,
Baptized in molten gold, and swathed in *dun*.
Byron.

DUN, *v. a.* & *n. s.* Sax. ðunan, to clamor. To claim a debt with vehemence and importunity: a clamorous creditor.

Borrow of thy back, and borrow of thy belly: they'll never ask thee again. I shall be *dunning* thee every day. *Bacon.*

An university *dun* is a gentleman's follower cheaply purchased, for his own money has hired him.
Bp. Earle.

When thou *dunnest* their parents, seldom they,
Without a suit before the tribune pay. *Dryden.*

They are ever talking of new silks, and serve the owners in getting them customers, as their common *dunners* do in making them pay. *Spectator.*

I remember what she won:
And hath she sent so soon to *dun*? *Swift.*

It grieves my heart to be pulled by the sleeve by some rascally *dun*—Sir, remember my bill.
Arbuthnot's John Bull.

Secretaries of state, presidents of the council, and generals of an army, have crowds of visitants in a morning, all soliciting for past promises; which are but a civiller sort of *duns*, that lay claim to voluntary debts. *Congreve.*

DUN, or BURGH, the name of an ancient species of buildings, of a circular form, common in the Orkney and Shetland isles, the Hebrides, and northern parts of Scotland. The latter term points out the founders, who at the same time bestowed on them their natal name of borg, a defence or castle, a Suedo-Gothic word; and the Highlanders universally apply to these places the Celtic name dun, signifying a hill defended by a tower, which plainly points out their use. They are confined to the countries once subject to the crown of Norway. With few exceptions, they are built within sight of the sea, and one or more within sight of the other; so that on a signal by fire, flag, or trumpet, they could give notice of approaching danger, and yield a mutual succour. In the Shetland and Orkney islands they are most frequently called wart or ward-hills, which shows that they were garrisoned. They had their wardmadher, or watchman, a sort of sentinel, who stood on the top and challenged all who came in sight. The gackman was an officer of the same kind, who not only was on the watch against surprise, but was to give notice if he saw any ships in distress. He was allowed a large horn of generous liquor, which he had always by him, to keep up his spirits. Along the Orkney and Shetland shores they almost form a chain; and by these means not only kept the natives in subjection, but were situated commodiously for covering the landing of their countrymen, who were perpetually roving on piratical expeditions. These towers vary in their inner structure; but externally are universally the same; yet some have an addition of strength on the outside. The burgh of Culswick in Shetland, notwithstanding it is built on the top of a hill, is surrounded with a dry ditch thirteen feet broad; that of Snaburgh in Unst, has both a wet and a dry ditch; the first cut, with great labour, through the rock. The burgh of Moura is surrounded by a wall, now reduced to a heap of stones, and the inside is cylindrical, not taper, as usual with others.

DUNAN AULA, an ancient tumulus in Craignish parish, in Argyllshire, where the ashes of Olaus, the son of a king of Denmark, were deposited, near the field of battle in which he was killed many centuries ago. General Campbell converted this mount into a burying-place, and erected a neat monument on the top of it, in memory of his only son. The tumulus is supposed to have been raised before the introduction of Christianity, as the urn, containing the ashes of Olaus, was discovered under a heap of stones by the workmen; and the practice of burning the dead was discontinued after the conversion of the ancient Caledonians.

DUNBAR, a royal borough of Scotland, in the county of East Lothian, once remarkable for a strong castle, the key of Scotland from the east, which gave shelter to Edward II. of England, in his flight from Bannockburn, but of which scarce a vestige now remains. This castle was bravely defended, in 1336, by Agnes, countess of March, sister of Randolph earl of Murray. In the absence of her husband, this heroine forced lord Montague to raise the siege and leave the country. Here are still preserved some of the Scottish pikes, six ells long, and formed for both offence and defence. Under the rock, on which the castle stands, are two natural arches, through which the tide flows. Between the harbour and the castle is a stratum of vast basaltic columns of red grit-stone. Dunbar is remarkable for the defeat of John Baliol's army by earl Warrenne, in 1296, and for a victory gained near it by Cromwell over the Scotch in 1650. Dunbar is governed by a provost, three bailies, dean of guild, treasurer, and fifteen councillors. It joins with Haddington, North Berwick, Lauder, and Jedburgh, in sending a representative to parliament. Within the royalty there is a handsome village, called Belhaven, near which the harbour was originally built. The east pier of the present harbour was begun during the protectorship of Cromwell, who granted £3000 towards defraying the expense. But it was still very imperfect, and could only receive a few small vessels; and even now, though a great deal of labor and money have since been expended in improving it, the access is difficult and the bounds small. It is defended by a battery of twelve guns, of nine, twelve, and eighteen pounders; besides which, here are a large and convenient dry-dock, and two considerable rope-walks: ship-building is carried on to some extent. Here are a soap-work and a cotton manufactory; two iron-foundries, and spinning-mills. Its principal

trade is the exportation of corn and of kelp. It has also a tolerable trade in the fisheries. It is equi-distant from Edinburgh and Berwick-upon-Tweed, being twenty-seven miles from each.

DUNBAR (William), a celebrated Scottish poet, born at Salton, in East Lothian, in 1465. He wrote several good poems for that age; and he has been frequently styled the Scottish Horace. The Golden Terge, and The Thistle and the Rose, are the most admired pieces of his production. He died about 1530. Sir David Dalrymple published an edition of his poems with notes.

DUNBARTON, the chief town of Lennox or Dunbartonshire, in Scotland, remarkable for its castle. This is a steep rock, rising up in two points, and every where inaccessible, except by a very narrow passage or entry, fortified with a strong wall or rampart. Within this wall is the guard-house, with lodgings for the officers; and from hence a long flight of stone steps ascends to the upper part of the castle, where there are several batteries mounted with cannon, the wall being continued almost round the rock. In the middle of this upper part, where the rock divides, there are commodious barracks, with a deep well in which there is always plenty of water. Here, likewise, are the remains of a gateway and high wall, at the top of which there was a wooden bridge of communication from one rock to another. This gateway was sometimes blocked up during the intestine commotions of Scotland, so that garrisons of different factions possessed different parts of the castle, and each had a gate towards the water. The castle stands in an angle formed at the conflux of the Clyde and Leven: so that it is wholly surrounded by water, except a narrow isthmus, and even this is overflowed at every spring tide: nor is there any hill or eminence within a Scotch mile of this fortress. It commands the navigation of the Clyde; and, being deemed the key of the western Highlands, is kept in some repair, and garrisoned with invalids, under the command of a governor and some subaltern officers. The government of it is worth £700 a year. There is a considerable manufactory of crown glass and bottles in the town. It has a good harbour. The vessels employ seventy seamen and carry about 2000 tons. Dunbarton was erected into a royal borough by king Alexander II., in 1221. It contains about 2000 inhabitants, and lies fifteen miles north-west of Glasgow, fifty-eight west of Edinburgh, and eighty-nine north of Dumfries.

DUNBLANE, a town in a parish of the same name, pleasantly seated on the river Allan, thirty miles north of Edinburgh. The battle of Dunblane, or Sherriffmuir, was fought near it, in 1715, when the duke of Argyll defeated the rebels under the earl of Marr. It has four fairs; in March, May, August, and November.

DUNCE, *n.s.* From Lat. *densus*, thick,—Minsheu; or Span. *tonto*, stupid,—Skinner; still more probably a word of reproach introduced by the Thomists against the Scotists, from the name of Duns Scotus, as Mr. Tooke and Mr. Todd suggest; i. e. Duns' disciples, dunces.

Dunce at the best, in streets but scarce allowed
To tickle, on thy straw, the stupid crowd. *Dryden.*

Was Epiphanius so great a *dunce* to imagine a thing, indifferent in itself, should be directly opposite to the law of God? *Stillingfleet.*

Till critics blame, and judges praise,
The poet cannot claim his bays.
On me when *dunces* are satiric,
I take it for a panegyric.
Hated by fools, and fools to hate,
Be that my motto, and my fate. *Swift.*

The schools became a scene
Of solemn farce, where Ignorance in stilts,
His cap well lined with logic not his own,
With parrot tongue performed the scholar's part,
Proceeding soon a graduated *dunce*. *Cowper.*

DUNCOMBE (William), a laborious author, born in London in 1690. He published a Translation of Racine's Athalia, which was well received by the public, and has gone through many editions. In 1724 he was editor of the works of Mr. Needler; in 1735, of the poems of his deceased brother-in-law, Mr. Hughes, 2 vols. 12mo.; in 1737 of the miscellanies of his younger brother Mr. Jabez Hughes, for the benefit of his widow, in 1 vol. 8vo.; and in, 1745, of the works of the Rev. Mr. Samuel Say, in 1 vol. 4to. In 1726 he married the only sister of John Hughes, Esq. whom he long survived. In 1734 his tragedy of Lucius Junius Brutus was acted at Drury-lane theatre. It was published in 1735, and again in 1747. The works of Horace, in English verse, by several hands, were edited by him in 2 vols. 8vo., with notes, &c. in 1757. A second edition, in 4 vols, 12mo. with many imitations, was published in 1762. In 1763 he collected and republished Seven Sermons by Archbishop Herring, on Public Occasions; with a Biographical Preface. He died Feb. 26, 1769, aged seventy-nine.

DUNCAN (Adam), lord viscount, a gallant British admiral, born at Dundee, in Scotland, in 1731, of an ancient and respectable family. Being a younger son, he was brought up to the sea, and after the usual gradations was appointed a lieutenant in the navy on the 10th of January, 1755; and about four years after he became a commander. He received his naval education, it is said, under the auspices of lord Keppel, through whom he was appointed captain of the Valiant of seventy-four guns. He was likewise on the court-martial of that distinguished veteran. In 1778 he was appointed to the Monarch, of seventy-four guns, one of the ships employed on the home station. About the end of December he was ordered, with Sir George Rodney, to Gibraltar, and greatly distinguished himself in the encounter with the Spanish squadron under Don Juan de Langara. Not long after this captain Duncan quitted the Monarch, and in 1782 was appointed to the Blenheim of ninety guns. He continued in this ship during the remainder of the war, being constantly attached to the channel fleet, then commanded by lord viscount Howe, and consequently proceeded with his lordship to Gibraltar in September. When peace was settled, captain Duncan was appointed to the Edgar of seventy-four guns, and continued in that command the three succeeding years. On the 14th of September 1787 he was made rear-admiral of the blue; of the white on the 22d of September 1790; and

in 1793 he became vice-admiral; thus rising progressively till the 1st of June 1795, when he obtained the rank of admiral of the blue. Upon this last advancement he hoisted his flag on board the Venerable of seventy-four guns, and was appointed to the command of the squadron stationed in the North Sea, and particularly destined to act against the Dutch, who had then a considerable naval force lying ready for service in the Texel. The mutinous spirit which, about this time, had broken out among the British seamen in different quarters, having spread itself to the squadron under admiral Duncan, occasioned a slackening of the blockade of the Texel; and the enemy, acquainted with his situation, prepared for sea, and in his absence, early in October, slipped out, but he soon gained intelligence of their motions, and on the 11th of October, about nine in the morning, a signal was given of having discovered the enemy: after a pursuit of three hours, the British fleet came up with the Dutch; the action commenced at about forty minutes past twelve o'clock, at which time every ship of the British had broken the enemy's line, and cut them off from getting into the Texel, the land being then distant about seven miles. While the rear was attacked by the larboard division under vice-admiral Onslow, admiral Duncan directed all his attention to the enemy's van, and his own ship, the Venerable, was in close action for nearly two hours and a half, when he observed all the masts of the Dutch admiral's ship (Vryheid) go by the board; she was, however defended for some time after in a most gallant manner; but was at last obliged to strike to the Venerable, admiral de Winter himself being the only man left on the quarter deck, who was not either killed or wounded. The Dutch lost also their vice-admiral, in the ship Jupiter, and seven other ships of the line; the remainder having escaped with the greatest difficulty. The attack, on the part of the British admiral, was considered one of the most daring, and the issue of the contest one of the most important, during the war; indeed it afterwards appeared that the Dutch fleet was designed to assist the French in their intended invasion of this country. In consequence of this very brilliant success, the gallant admiral was, on the 1st of the same month, created viscount Duncan of Camperdown, and baron Duncan of Lundie, in the shire of Perth. A pension also of £2000 per annum was granted to him, and the two next heirs of the peerage. He died in 1804. Lord Duncan was married to Miss Dundas, daughter of Robert Dundas, Esq. lord president of the court of session in Scotland, June 6th 1777, by whom he had several children. His first son, Mr. Henry Duncan, died at Edinburgh on the 23d December, 1787; and his second son, Robert, born in 1785, succeeded to the estate and honors.

Duncan (Daniel), an eminent physician, born at Montauban, Languedoc, in 1649. He received his education at Montpelier, where he took his degree. He resided at Paris till the death of Colbert, who was his patron, after which he removed to his paternal estate at Montauban; but during the persecution of the Protestants, in 1690, he went to Geneva. He afterwards became successively physician to the prince of Hesse Cassel and the king of Prussia. He died in London in 1735. He wrote an Explanation of the Animal Functions; Natural Chemistry; Salutary Advice against the Abuse of Hot Liquors, particularly coffee, chocolate, and tea.

DUNDAS (Henry), viscount Melville, son of lord Arniston, was born in 1740, and educated at the University of Edinburgh. He was admitted, in 1763, a member of the faculty of advocates; in 1773 became solicitor-general; in 1775 lord-advocate; and in 1777 joint keeper of the signet for Scotland. In 1782 he was sworn of the privy council, and made treasurer of the navy; but did not continue long in office, the coalition between lord North and Mr. Fox having displaced his party. On their return to power, he resumed office under the ministry of Mr. Pitt, to whom he firmly attached himself during their joint lives. On the passing of the act for regulating the affairs of the East India Company, Mr. Dundas was appointed president of the board of control; in 1791 he was made secretary of state for the home department; and in 1794 secretary at war. On the resignation of Mr. Pitt, in 1801, he also retired, and was created viscount Melville. When the former resumed the helm of affairs, he was appointed first lord of the admiralty. In 1805 lord Melville was impeached before the house of lords, of high crimes and misdemeanors in his office of treasurer of the navy. But the evidence adduced did not directly implicate him in the malversations of his deputy Mr. Trotter. He was accordingly acquitted. But he never afterwards held any public situation, except that of privy counsellor. His death took place in May 1811.

DUNDALK, a barony in the county of Louth, province of Leinster, in which is a borough, market, post, fair, and sea-port town of the same name, on a bay of the Irish channel, bearing its name. It lies above twenty-one miles five furlongs north of Drogheda, and fifty-two miles from Dublin. Lat. 53° 57′., long. 6° 42′. A handsome bridge was thrown over the Castletown River in 1822, at the end of the town. It is the assizes town, and has some trade; it consists of one wide street near a mile long, and some cross avenues; has a very good market-house, a court-house, a beautiful specimen of Grecian architecture, after the design of the Temple of Theseus; and carries on a manufacture called Dundalk cambrics. It has been fortified (though now dismantled), as may be seen by the ruins of the walls, and a castle destroyed in 1641. In the reign of Edward II. it was a royal city, and is the last where a monarch of Ireland was actually crowned and resided. It is very advantageously situated for an inland trade, and the port is very safe for shipping. The bay, which is nine miles across, and nine inland, has good moorings at all times in four to upwards of eight fathoms water, with very good land-marks either for bringing up, or making the harbour, and in crossing the bar at high water in ordinary neap tides, this is from fifteen to eighteen feet water; besides many other good qualities, the bay abounds with all kinds of fish customary in the channel. A pier might be built for about £3000 at a place called

iles-quay, which would shelter vessels waiting or tide to cross the bar, and enable the inhabiants to procure fuel at a cheap rate, while at resent the only supply is turf from a bog ten iles distant. Here are a charter-school of ighty-six girls; a school of 264 children on rasmus Smith's foundation, and an endowed lassical school of high character; a Protestant hurch; two Roman Catholic chapels, and two eeting-houses, one for Presbyterians, the other r Methodists. Exports, corn, live cattle, beef, nd butter. Imports, coal and flax-seed. Maufactures are, salt, soap, and leather; here is extensive barrack.

DUNDEE, a royal borough of Scotland, in ngus-shire, seated on the north-side of the ay, about twelve miles from its mouth, forty orth of Edinburgh, and twenty-three east of Perth. s situation for commerce is very advantageous. rading vessels of the largest burden can get into e harbour; and on the quay there are very conenient and handsome warehouses, as well as good oom for ship-building, which is carried on to large extent. The houses are built of stone, enerally three or four stories high. The marketlace or high street in the middle of the town is spacious oblong square, from whence branch t the four principal streets, which, with a numer of lesser ones, are well paved. On the south de of the market-place stands the town house; elegant structure, with a very handsome ont, piazzas below, and a neat spire over it 140 et high. This building was finished in 1734, d contains the guild-hall, the court-room, the nk, vaulted repositories for the records, and e common prison, which is in the upper story, d does honor to the taste and humanity of the agistrates, under whose auspices it was conructed, being well aired commodious rooms, at e same time very strong and secure. The eal-market and shambles, which were formerly nuisance on the High street, were removed, and their place was erected by the nine incorpoted trades, on the east end of the above large uare, a grand building, with a large and elegant pola: in the ground floor of which is a very at coffee-room, and several merchants' shops; d in the upper stories public rooms for each ade, and a common hall fifty feet long, irty feet broad, and twenty-five feet high; ving its front to the square decorated with mic columns. St. Andrew's Church, also built the incorporations, stands on a rising ground little north from the Cowgate-street; and has elegant spire 130 feet high, with a peal of lls much admired. Dundee has also four other urches, and five ministers on the establishment. he old church, in which were originally four aces of worship, had been a very magnificent ilding, with a large square Gothic tower or eeple, 186 feet high, on the west end of the urch. It was in the form of a cross, erected David earl of Huntingdon, brother to William of Scotland, and was dedicated to the Virgin ary. This he did on his return from the ird crusade (in which, with 500 of his countryen, he had accompanied Richard I. of England), D. 1189, in gratitude for his deliverance from veral imminent dangers, and particularly from shipwreck, by which he had nearly perished when in sight of this town. At the same time he changed its name from Alectum to Dei Donum, whence its present name is thought by many to be derived; while others maintain that its name was Duntay, or the Hill of Tay. A hill rises on the north of the town to a great height, and is called The Law of Dundee. On its top, there are evidently the remains of a camp, said to have been first erected by Edward I. of England, and last repaired by general Monk. Dundee had an old castle which was demolished by the celebrated Scotch governor Sir William Wallace, who was educated in this town, which so exasperated Edward I. that, taking the town by storm, he set fire to the churches; and a number of the inhabitants, having taken sanctuary there, with their most valuable effects, were all burnt along with them. The desolation he brought on the church continued till the year 1787, when a noble edifice began to be built on the site of the one that was burnt down, in which the ancient Gothic of the outside is excellently united with internal modern architecture, making one of the largest and neatest churches in the kingdom, and again completing the superb superstructure, as erected at the first by the earl of Huntingdon. Besides the public grammar-school, and the English schools, there is an academy, or rather college, for mathematics, the French and Italian languages, and the polite arts, with proper professors in the different branches, and a large apparatus for natural and experimental philosophy. This town suffered greatly last century during the civil war, being sometimes under the command of one party, and at others of another. In 1645 the marquis of Montrose took it by storm; and in 1651, under the command of its provost major-general Lumsden, it vigorously opposed general Monk, who carried it by storm, September 1st, and put all in arms to the sword. And so great were the riches of Dundee, all the neighbouring gentlemen having retired to it with their best effects, as a place of safety, that every private soldier in Monk's army had nearly £60 sterling to his share of the plunder, there being above sixty merchant vessels in the harbour at that time; and the like number of vessels sailed for England loaded with the spoils of the unfortunate inhabitants. The magistrates have been at great expense in enlarging and fitting up the harbour, so as to render it of easy access, safe and commodious; and have made the passage over the Tay, where there is a great resort, so convenient, that travellers with their horses can get over it at any time of tide; a sufficient number of boats properly manned being always ready. The river Tay before Dundee is about three miles broad; and, being sheltered by high lands on both sides, is a safe road for ships of the greatest burden. The piers are extensive, broad, and well adapted for the purposes of loading and discharging vessels; and the harbour is equal to any in Scotland. There are upwards of 160 ships of different denominations belonging to the port, which employ upwards of 1300 seamen in the Greenland fishery, and the Baltic and the London trades. A wet-dock has been constructed on a

very extensive scale, and on the quay are several new ranges of warehouses. The principal manufacture here is of linen, particularly osnaburghs, canvas, bagging, &c., for exportation, and the Dundee colored thread has long been in high repute. Two sugar-houses are also established here. Till 1745 the town had only draw-wells; but since that period, it is most amply supplied from a large fountain of excellent water, conveyed into the town in leaden pipes, and discharged by good wells at proper distances. The salmon fishing in the Tay is of much importance; and the town is well supplied with fish of various kinds, though much raised in price of late years, on account of the quantities sent to London. Dundee was the birth-place of the celebrated Hector Boethius. It joins with Perth, Forfar, St. Andrew's, and Cupar, in sending a representative to the British parliament.

DUNDONALD Castle, an ancient royal castle, seated on an eminence near a village of the same name, where Robert II. the first monarch of the house of Stuart, resided much and at last died in 1390.

DUNFERMLINE, a royal borough of Fifeshire, Scotland, fourteen miles west of Kirkaldy, and fifteen north-west of Edinburgh. The greatest part of the town is situate on a hill which commands a view of the surrounding country. Here are the remains of a magnificent abbey and palace of the kings of Scotland, in which the princess Elizabeth, daughter of king James I. was born. In the inn of this town was the marriage bed of James VI. and his queen; it is still entire, and is now in the possession of the earl of Elgin. This place is noted for a manufactory of figured diapers. It is governed by a provost, two bailies, dean of guild, and eighteen counsellors, among whom are the eight deacons of incorporations. The houses of Dunfermline are well built, and the size of the town is rapidly increasing. A large suburb, connected by the bridge, and road over the glen on the west, opposite to the principal street, add much to the elegant appearance of the town. This bridge is of a peculiar structure. An arch 297 feet long, twelve broad, and fifteen feet five inches high, was thrown over the burn in the bottom of the glen; and the remaining hollow filled up by a mound of earth, sixty-eight feet six inches thick at the centre, having a gradual slope on both sides to the extremity of the stone arch below. On the top is the road, enclosed on both sides by houses forming a very neat street. On the slopes of the mound, and at the back of the houses, are very convenient hanging gardens. The church of Dunfermline was the burial place of several of our Scottish monarchs; particularly of Malcolm III. with his queen St. Margaret; Edgar; Alexander I. with his queen Sibilla; David I. and his two queens; Malcolm IV.; Alexander III. with his queen Margaret; and Robert I. with his queen Isabel; besides many other princes and nobles. About 85,000 tons of limestone are quarried in the neighbourhood; and about 200,000 bolls of limeshells, and 35,000 chaldrons of lime, are sold annually; 90,000 tons of coals are also raised, of which 60,000 are exported. A beautiful specimen of the art of weaving is preserved in the chest of the incorporation. It is a man's shirt wrought in the loom, about 100 years ago, by a weaver of the name of Ingles. The shirt is without seam, and was finished by the ingenious artisan, without the least assistance from the needle. Dunfermline has eight annual fairs and a market on Friday.

DUNG, *n. s.* & *v. a.* }
DUNG-FORK, *n. s.* }
DUNG-HILL, } Sax. ᵹunᵹ; Goth. *dung*; Swed. *dynger*, from Teut. *tingen*, to till land. Excrement or other matter used to
DUNG-YARD, }
DUNG'Y, *adj.* }
fatten land. To manure with dung. Dungy is base, mean, vile.

He raiseth the poor out of the dust, and lifteth up the beggar from the *dung-hill*, to set them among princes. *Bible.* 2 *Sam.* ii. 8.

The poor he raiseth from the dust,
Even from the *dunghil* lifts the just. *Sandys.*

His *dunghil* thoughts, which do themselves enure
To dirty dross, no higher dare aspire.
Spenser on Love.

Out, *dunghil!* dar'st thou brave a nobleman?
Shakspeare.

I, his brother, gain nothing under him but growth; for the which his animals on his *dunghils* are as much bound to him as I. *Id. As You Like It.*

We need no grave to bury honesty;
There's not a grain of it, the face to sweeten
Of the whole *dungy* earth. *Id. Winter's Tale.*

For *dung*, all excrements are the refuse and putrefactions of nourishment. *Bacon's Natural History.*

It was received of old, that *dunging* of grounds when the west wind bloweth, and in the decrease of the moon, doth greatly help.
Bacon's Natural History.

For when from herbs the pure part must be won,
From gross by 'stilling, this is better done
By despised *dung* than by the fire or sun. *Donne.*

There cannot be a more evident, palpable, gross manifestation, of poor, degenerate, *dunghilly* blood and breeding, than a rude, unpolished, disordered, and slovenly outside. *Massinger.*

There as his dream foretold, a cart he found,
That carried compost forth to *dung* the ground.
Dryden.

Perhaps a thousand other worlds, that lie
Remote from us, and latent in the sky,
Are lightened by his beams, and kindly nurst,
Of which our earthly *dunghil* is the worst. *Id.*

Two cocks fought a duel for the mastery of a *dunghil*. *L'Estrange.*

Never enter into a league of friendship with an ingrateful person; that is, plant not thy friendship upon a *dunghil*: it is too noble a plant for so base a soil. *South.*

He soon would learn to think like me,
And bless his ravished eyes to see
Such order from confusion sprung,
Such gaudy tulips raised from *dung*. *Swift.*

Dungforks and paddles are common every where.
Mortimer.

Any manner of vegetables cast into the *dungyard*.
Id.

They are not hawks or kites; they are only miserable fowls whose flight is not above their *dunghill* or henroost. *Burke.*

Aye, as the *dunghill* may conceal a gem
Which is now set in gold, as jewels should be.
Byron.

DUNGANNON, a barony in county Tyrone, province of Ulster, having in it a borough, mar

ket, fair, and post town of the same name; situated about fourteen miles north of Armagh, and ninety-one and a half north-west of Dublin. Lat. 54° 28′, long. 7° 18′. It returns one member to parliament. The town belongs to lord Northland who has a handsome seat there. Fair days, first Thursday in February; second Thursday in April; second Monday in May; first Thursday in July; third Tuesday in August; first Monday O. S. in October; last Tuesday in November. This town was made remarkable for the Ulster delegation of volunteers on the 15th of Feb. 1782. There is a part of the town called the New Town, the houses of which in general are too narrow. Its chief business is the linen trade. In 1816 about £2000 per week was regularly expended in that market on the purchase of that article. Here is a poor school endowed by the lady Northland, and a free school founded by Charles I., and endowed with 1000 plantation acres, producing about £800 per annum. There is a good house here, and glebe of 405 acres. In this parish are the coal mines of Drumglass, leased by the primate to the Hibernian Mining Company for £300 per annum: the company have already expended £2000 in the erection of steam engines and other necessary apparatus for working the mines.

Dung Meers, in husbandry, places where soils and dungs are mixed and digested together. These consist of pits, prepared at the bottom with stone and clay, that they may hold water, or the moisture of the dung. They ought to be so situated, that the sinks and drips of the houses and barns may run into them. Into these are cast refuse, fodder, litter, dung, weeds, &c., where they lie and rot together, till the farmer has occasion for them.

DUN'GEON, *n. s.* Anciently donjon, the principal tower of a castle, from Cel. and Brit. *dun*, a hill on which towers usually stood. A close prison.

Then up he took the slumbered senseless corse,
And, ere he could out of his swoon awake,
Him to his castle brought with hasty force,
And in a *dungeon* deep him threw without remorse.
Spenser.

No man can marvel how that tyrant blinded his captives, when he hears that he brought them immediately, out of a dark *dungeon*, into rooms that were made bright and glorious.
Bp. Hall. Contemplations.

We know not that the king of heaven hath dooomed
This place our *dungeon*; not our safe retreat
Beyond his potent arm. *Milton's Paradise Lost.*

Death only can such thieves make fast
As rob, though in a *dungeon*. *Marvell.*

By imagination, a man in a *dungeon* is capable of entertaining himself with scenes and landscapes, more beautiful than any that can be found in the whole compass of nature. *Addison.*

Let Vanity adorn the marble tomb
With trophies, rhymes, and 'scutcheons of renown,
In the deep *dungeon* of some Gothic dome,
Where night and desolation ever frown. *Beattie*

An eye of most transparent light,
That almost made the *dungeon* bright. *Byron.*

DUNIPACE, Hills of, two artificial mounts in a parish of the same name in Stirlingshire said to be of great antiquity. Each of them covers about an acre of ground. The whole structure of these mounts is of earth; but they are not both of the same form and dimensions. The more easterly one is perfectly round, resembling an oven, and upwards of fifty feet in height. The other bears no resemblance to the eastern one either in shape or size. At the foundation it is nearly of a triangular form; but the superstructure is quite irregular; nor does the height thereof bear any proportion to the extent of its base. These mounts are now planted with firs, which, with the parish church of Dunipace standing in the middle between them, and the river running hard by, give this valley a very romantic appearance. The common account given of them is, that they were erected as monuments of a peace concluded in that place between the Romans and the Caledonians, and that their name partakes of the language of both people; dun signifying a hill in the old language of this island; and pax, peace, in the language of Rome. And we find in history, that no less than three treaties of peace were, at different periods, entered into between the Romans and Caledonians: the first, by Severus, about A. D. 210; the second, soon after, by his son Caracalla; and the third, by Carasius, about 280; but of which of those treaties Dunipace is a monument, we cannot pretend to determine.

DUNKELD, a town of Scotland, in Perthshire, seated on the north side of the river Tay, in a situation truly romantic, among high and almost inaccessible craggs, partly naked and partly wooded. It is the chief market town of the Highlands, and has been greatly improved with buildings by the dukes of Athol. It was the capital of ancient Caledonia. About the dawn of Christianity, a Pictish king made it the seat of religion, by erecting a monastery of Culdees there; which king David I., in 1130, converted into a cathedral: it ranked as the first in Scotland. The entire shell of the cathedral still remains, the east end serving for a parish church, on the north side of which is the burial place of the dukes of Athol. The architecture is simple and elegant, the pillars are round. The monument of one of its bishops remains in the south aisle of the nave, with that of Alexander Stuart, earl of Buchan, third son of Robert II., called, for his cruelty, The Wolf of Badenoch. The tower at the west end, with a singular crack down one of its sides, adds to the picturesque appearance which the whole makes, among the venerable pines at the end of the duke's garden. His grace's seat is a neat modern building, with pleasant gardens, and a fine cascade on the water of Bran, which, in its way from the western hills, forms a fall of 150 feet, called the Rumbling Brig, from a narrow bridge made by the fall of two rocks across the stream. Dunkeld has four fairs, January 21, February 3, March 8, and second Tuesday in November. Besides the tanning of leather, the linen manufacture has been carried on to considerable extent, for a number of years, and the manufacture of cotton goods is now also introduced. Dunkeld is fifteen miles north-west from Perth.

DUNKIRK, from dun, Celt. a hill, and kirk, Flem. a church; a maritime town of France, in the department of the north, and ci-devant province of French Flanders. It is the most easterly harbour on that side of France which is next to Great Britain, and was originally a mean hamlet, consisting only of a few fishermen's huts. Baldwin, earl of Flanders, about A.D. 960, thinking the situation convenient, enlarged it into a town, and surrounded it with a wall. In the year 1322 Robert, earl of Flanders, who held it as an appendage, built a castle for its defence, which was afterwards demolished by the revolters of Flanders. Robert of Bar erected a fortification round it, the remains of which are visible on the side next the harbour. The emperor Charles V., who held it as part of Flanders, built another castle to defend the harbour, but this was also demolished soon afterwards. In 1558 the French, under marshal de Thermes, took Dunkirk by storm, and almost ruined the place; the Spaniards recovered it again in about a fortnight, and put all the French to the sword. During a peace procured for the inhabitants by Philip II., of Spain, they rebuilt their town with greater splendor than before, and flourished for some time by privateering against the Dutch; at length they fortified their town and harbour, and fitted out fifteen ships of war at their own charge. In 1634 the inhabitants agreed with those of Bergues to dig a canal, at their joint expense, for a communication between the two towns; which was some time afterwards effected. By this time Dunkirk was become the best harbour the Spaniards possessed in Flanders, which induced many foreigners to settle there; and, it being necessary to enlarge the town, a new fortified wall was built at a considerable distance from the former. In 1646 it was besieged and taken by the prince of Condé. In 1652 it was retaken by the archduke Leopold, then governor of the Netherlands. France entering into a treaty with England, in 1655, the Dunkirkers, with views of pecuniary advantage, fitted out privateers against both these powers; the consequence of which was, that the French, assisted by Cromwell, attacked and took it, and it was left in the hands of the English. It was even then of great importance to us; for, during the war in which it was taken, the Dunkirkers had made prizes of no less than 250 English vessels, many of which were of great value. The fortifications were now, therefore, improved, and a citadel built; yet the English kept it only four years; for in 1662, two years after the Restoration, Charles II. sold this valuable acquisition to France, for the paltry sum of £500,000. It was accordingly taken possession of, for Louis XIV., by the count d'Estrades, on the 29th November, 1662. The celebrated engineer, Monsieur Vauban, now erected an arsenal here, large enough to contain all the stores necessary for fitting out and maintaining a large fleet; the fortifications on the land side were constructed in a manner that was thought to render them impregnable; and, towards the sea, the entrance of the harbour was strongly fortified. These works were completed in 1680; and, in 1685, the whole circumference of the basin was faced with masonry, and the quays completely formed. In 1689 the fort, called the Cornichon, and some other works, were added. Upwards of thirty years were employed in improving the fortifications. At the treaty of Utrecht, it having been made appear that the privateers of Dunkirk had, during the war then closing, taken from the English no less than 1614 prizes, valued at £1,334,375 sterling, it was stipulated, that the fortifications of the city and port of Dunkirk should be entirely demolished, and the harbour filled up; and queen Anne deputed colonels Armstrong and Clayton to inspect the execution of this part of the treaty. A large bar was now built across the mouth of the harbour, between the jetties and the town, by which all communication between it and the canal, which formed its entrance, was entirely cut off. The sluices were also broken up, and the materials of them broken to pieces. This was scarcely accomplished, when Louis XIV. ordered 30,000 men to construct the new canal of Mardick, which in a short time they accomplished; and thus the harbour was rendered almost as commodious as ever; but in 1717 this likewise was rendered unserviceable. In 1720, during a great storm, the sea broke up the bar, and restored the use of the harbour in a very considerable degree. When, in 1740, Great Britain was engaged in a war with Spain, Louis XV. set about improving the advantage which Dunkirk had derived from the storm in 1720, by restoring the works and repairing the harbour. He rebuilt the jetties and erected new forts in the place of those which had been destroyed; and soon afterwards espoused the cause of Spain, and became a principal in the war. But at the peace of Aix-la-Chapelle, in 1748, it was stipulated, that all the works towards the sea should be destroyed a second time; yet, in 1756, the place was again in a good state of defence. At the peace of 1763 it was once more stipulated that a British commissary should reside at Dunkirk, to see to the destruction of this harbour. But by the peace of 1783 he was withdrawn, and the French were left to resume their works. The British, under his late royal highness the duke of York, laid siege to this town in 1793, but were soon obliged to abandon it.

Dunkirk is, on the whole, a well-built town: the houses are chiefly of white brick; but seldom consist of more than two stories. It is a place of brisk trade in fish, corn, colonial produce, and home manufactures. Its chief inconvenience is a scarcity of fresh water. The barracks are extensive and elegant; and the churches contain some beautiful paintings. The town is approached by a canal of a mile and a half in length, the port and basin being in the interior of the town; the roadstead is at the outer extremity of the canal, and formed by a sand-bank running parallel to the shore. A mound and ditch surround the town. Dunkirk was restored to the privilege of a free port by a royal ordinance of the 22d April, 1816. Population about 20,000. It is twenty-five miles north-east of Calais, and forty north-west of Lisle.

DUNMORE, East, a post town in the county of Waterford, eighty-four Irish miles from Dub-

lin, and nine from Waterford city, lat. 50° 8′ 17″, N. long. 7° 3′, W., is remarkable for a pier built for establishing a packet station to ply between this port and Milford Haven, from which it is distant seventy-eight nautical miles. This great work was undertaken at the expense of government, as an important step in the desirable object of improving and facilitating communication between England and Ireland in 1814, from a design by A. Nimmo, Esq. and has been executed at an expense of £80,000. The packets formerly ran up the harbour or river to Cheek Point, the junction of the Suir and Barrow rivers; and at this place were not unfrequently wind-bound. The new harbour is immediately upon the Atlantic, and, being carried into five fathoms at low water, is accessible at all times, and may be sailed from with all winds. The pier issues from a lofty bold conglomerate rock, which has furnished all the rubble stone consumed in its formation; and is carried in a N. N. E. direction to a distance of 1000 feet, having a base of 250 feet in breadth; the back, being exposed to the heavy swell of the Atlantic, is paved with enormous blocks of stone. The inside of the pier is an upright quay wall, forty-five feet in height, faced with hewn sand-stone; the foundations of which were laid by the aid of the diving-bell in twenty-four feet of water. On the quay is an elegant range of vaulted apartments, containing the light keeper's residence, coals for the steam packets, and the stores. The platform over these forms an agreeable promenade, and has a light-house at its extremity, the design of which is a fluted Doric column, copied from the pillars of the temple at Pœstum: the lantern exhibits red lights to the sea, and bright towards Waterford haven. There is a slip constructed on the inside of the pier, affording a safe and convenient place for landing and embarking at all times. On the opposite side of the harbour is a small rock-formed island, curiously perforated by natural arches; the extremity of this rock, below water, is marked by a stone beacon, connected to the island by a suspension foot-bridge of very simple construction, 180 feet span. This island divides the whole enclosed space into an outer and inner harbour, the latter of which, a surface of six acres, is completely sheltered from the awful swell of the Atlantic by the judicious position of the pier, while the outer might be so enlarged (to nine acres) as to admit line of battle ships. The harbour has fully realised expectation; the economy observed in its construction is very conspicuous, and, during the period of the erection of the pier, little or no damage was sustained by the shipping that were necessitated to seek shelter there.

DUNMOW, Little, a village in Essex. It had once a priory, and is still famous for the custom instituted in the reign of Henry III., by Robert de Fitzwalter, and now the tenure of the manor: namely, that whatever married couple will go to the priory, and swear, kneeling upon two sharp-pointed stones in the church, that they had not quarrelled, nor repented of their marriage, within a year and a day after it took place, shall receive from the lord of the manor a flitch of bacon. Some old records mention several that have claimed and received it. It has been actually received so lately as since the year 1750, by a weaver and his wife, of Coggeshall in Essex. It has been demanded more recently still; but the ceremony being attended with considerable expense to the lord of the manor, the demand is now evaded. See Bacon, Service of the.

DUNN (Samuel), an English mathematician, born at Crediton in Devonshire. He opened a school in his native town, where he gained considerable reputation as a teacher, and where he continued for several years. He afterwards removed to Chelsea, where he kept an academy, and became mathematical examiner for the East India service. He published an Atlas, folio; Treatises on Book-keeping, Navigation, &c. He died in 1792, and left his property towards founding a mathematical school at Crediton.

DUNNEMARLE Castle, i.e. the castle near the sea, an ancient fort of the Macduffs, thanes of Fife, now in ruins; said to have been their utmost boundary to the west. It was here that lady Macduff and her children were murdered by the tyrant Macbeth. It was seated on the banks of the Forth, in a fine situation, now called Castle-hill.

DUNNING (John), an eminent English lawyer, born at Ashburton in Devonshire, in 1731, where his father practised as an attorney, and where he began the studies connected with his profession. But after continuing some time with his father, he entered of the Temple, and was called to the bar, where he soon distinguished himself as an able lawyer and a powerful orator. He likewise obtained a seat in parliament, where he was particularly noticed on the side of the opposition. He afterwards became solicitor-general and recorder of Bristol, and chancellor of the duchy of Lancaster. In 1782 he was created lord Ashburton, but died the year following, leaving an infant son to inherit the title. His lordship was an upright lawyer, and it is recorded of him, much to his honor, that he often pleaded the cause of the poor unsolicited, and without a fee.

DUNNOTAR Castle, an ancient fortress, now in ruins, built in the reign of Edward I. by an ancestor of the Marischal family. In 1661 the regalia of Scotland were lodged in it, to preserve them from the English army, and a garrison, with ammunition and provisions, obtained for their defence by E. Marischal, the proprietor; who, upon joining the king's forces in England, appointed George Ogilvy, of Barras, lieutenant-governor of the fort. This trust he maintained with the greatest heroism. For though besieged and summoned to surrender by general Lambert, so early as November 1651, he held out obstinately for six months, till May 1652; when, the siege being turned into a blockade, and provisions and ammunition all spent, the garrison began to mutiny, and he at last capitulated upon honorable terms; but not till he had privately conveyed the regalia to the clergymen of Kinneff. The English not finding the regalia, shut up the governor and his wife close prisoners for years, using every means of severity and allurement to produce a discovery, but in vain. Mr. Ogilvy continued faithful to his trust till the Restoration, when he

returned the regalia to E. Marischal; but to the disgrace of Charles II.'s administration, received no other reward for all his fidelity, sufferings, and losses, but the title of baronet, and a new coat of arms! In 1685 Dunnottar castle was employed as a prison for 167 Presbyterians, who had been seized in the west of Scotland, during the persecution, and were here treated with the greatest cruelty; the whole number of men and women being confined during the warmest season of the year, in one vault, which is still to be seen entire, and hence called the Whigs' Vault. A list of their names is on record in the sheriff court office of the county; and a grave-stone in the church-yard of Dunnottar, placed upon those who died under the confinement, narrates the fact.

DUNSE, a market town of Scotland, in the county of Merse, containing about 2100 inhabitants. It is situated on a rising ground in the middle of the county, and has a weekly market for cattle. Dunse has four fairs, in March, June, August, and November, for horses, sheep, and black cattle.

DUNSINNAN, a hill of Scotland in Perthshire, celebrated in dramatic story by the immortal Shakspeare. It lies partly in the parish of Collace and partly in that of Abernyte. The ruins of Macbeth's castle are still to be seen on that part of the hill which lies in Collace. 'The site of it,' says Mr. Adamson, 'was admirably chosen for a place of defence, being a conical rising on the west end of the hill, almost inaccessible except on one side. The excellence of its situation had before pointed it out to Kenneth III. and other kings, as a secure place of residence. Upon the top of king's seat, there is the ruin of a circular enclosure, similar to Macbeth's castle, but much smaller. This, as it commanded a more extensive prospect than the castle, taking in a vast extent of country, great part of the sea-coast, from the mouth of the Frith of Forth, to the south Esk, probably was a watch-tower, or outpost: and from this circumstance had received its name.'

DUNS Scotus (John), a Franciscan friar, commonly called Doctor Subtilis, was born in 1274; but whether in England, Scotland, or Ireland, has long been a matter of dispute among the learned of each nation. When a boy, he became accidentally known to two Franciscan friars; who, finding him to be a youth of extraordinary capacity, took him to their convent at Newcastle. From thence he was sent to Oxford, where he was made fellow of Merton College and professor of divinity; and Mackenzie says, that not less than 30,000 students came to Oxford to hear his lectures. His fame was now become so universal, that the general of his order sent him to Paris, in 1304, where he was honored first with the degree of B. D. then of D. D. and in 1307 was appointed regent of the divinity schools. During his residence here, the famous controversy about the immaculate conception of the virgin Mary arose. Albertus Magnus maintained that she was born in original sin. Scotus advanced 200 arguments in support of the contrary opinion, and convinced the university, that she was really conceived immaculate. This important nonsense continued to be disputed till 1496, after the council of Basil, when the University of Paris made a decree, that no student who did not believe the immaculate conception, should be admitted to a degree. Our author had not been above a year at Paris, when his general sent him to Cologne; where he was received with great pomp and ceremony by the magistrates and nobles of that city, and where he died of an apoplexy soon after his arrival, in 1308, in the thirty-fourth year of his age. Paul Jovius and others have reported, that Scotus was buried in an epileptic fit; and that, upon removing his bones, he appeared to have turned himself in his coffin. He was doubtless one of the first wranglers of his time, admirably well versed in scholastic divinity, and a most indefatigable writer; and, if all his huge volumes hardly contain a page now worth perusal, it was the fault of the age. He was the author of a new sect of schoolmen called Scotists; who opposed the opinions of the Thomists. He was a most voluminous writer; his works making 12 vols. folio; as published at Lyons by Luke Wadding, in 1629.

DUNSTABLE, a town in Bedfordshire with a market on Wednesdays; was made a borough and market town by Henry I. who had a royal palace near the church, called Kingsbury. He also built a priory here, of which there now remains only a part. The front of the church is singular; the great door is under a semi-oval arch, richly ornamented with various grotesque sculptures; the tower stands at the north-western angle of the building. The town is seated on a chalky hill. It has several good inns, it being a great thoroughfare on the northern road. It consists of four streets, intersecting each other at right angles; and in the centre stood one of those beautiful crosses of queen Eleanor, but it was destroyed by the enthusiasts in the time of the civil wars. Here is an extensive manufacture of various articles of use and ornament in straw, particularly hats, known by the name of Dunstable, all over the kingdom; and which employs a great number of women and girls. It lies seventeen miles south of Bedford, and thirty-four north-west of London.

DUNSTAFFNAGE, an ancient castle and royal palace of Scotland, in the county of Argyll and Lorne. It was a chief seat of the Scottish kings before the conquest of the Picts by Kenneth II., A. D. 843. In this place was long preserved the famous stone, the palladium of Caledonia; brought, says the legend, out of Spain, where it was first used as a seat of justice by Gathelus, the son of Cecrops, contemporary with Moses. It continued here as the coronation chair till the reign of Kenneth II. who removed it to Scone. Some of the ancient regalia were preserved here, but the late keeper's servants, during his infirm years, embezzled them for the silver ornaments; and left only a battle-axe, nine feet long, of beautiful workmanship, and ornamented with silver. The castle is square; the inside only eighty-seven feet; partly ruinous, partly habitable. At three of the corners are round towers; one of them projects very little. The entrance is towards the sea at present by a stair-case, in old times probably by a drawbridge, which fell from a little gateway. The masonry appears

ry ancient; the tops battlemented. This pile seated on a rock at the mouth of Loch Etive, hose waters expand within to a beautiful bay, here ships may safely ride in all weathers. Of is building, the founder of which is unknown, tle remains except the outer walls, which, ough roofless, are still in good order; and ithin which some buildings have been erected, hich serve as the residence of the laird. The ıke of Argyll is hereditary keeper under the own.—At a small distance from the castle is a ıned chapel, once an elegant building; and at ıe end an enclosure, a family cemetery. Opɔsite to these is a high precipice, ending abptly and turning suddenly towards the southst. A person concealed in the recess of the ck, a little beyond the angle, surprises friends ationed at some distance beneath the precipice ith a very remarkable echo of any word, or en sentence, he pronounces; which reaches the last distinct and unbroken. The repetiɔn is single, but remarkably clear. In 1307 is castle was possessed by Alexander Macdoul lord of Argyll, a friend to the English; but as that year reduced by Robert Bruce, when lacdougal sued for peace with that prince, and as received into favor. About 1455 it was e residence of the lords of the Isles; for here ımes, last earl of Douglas, after his defeat in nnandale, fled to Donald, the regulus of the me, and prevailed on him to take arms and ırry on a predatory war against his sovereign, ames II.

DUNSTAN (St.), an Anglo-Saxon divine and atesman of the tenth century, whose history as come down to us sufficiently adorned with gends. He appears to have been born about .. D. 925, and to have been educated at Glasɔnbury by Irish ecclesiastics. In addition to a nowledge of the Latin tongue, and the usual arning of his profession, he acquired in his outh considerable skill in music, metallurgy, nd the arts of painting and carving. He conıructed an organ of brass pipes, and filled with ir from bellows; and there is preserved in the lodleian library a drawing made by him of hrist, with himself kneeling at his feet. He lso excelled, like a modern statesman and prince f Spain, in preparing ladies' robes, to be afterards embroidered (MS. Cleop. b. 13.). Thus ccomplished, he was early introduced to the ourt of king Athelstan, by his uncle Athelm, rchbishop of Canterbury. But some indiscretion, r the jealousy of the courtiers, compelled him to etreat from this hopeful scene; and the disapɔointment of his prospects produced a serious t of illness. He now took the vows at Glasɔnbury, and devoted himself with ardor to the liscipline of St. Benedict. It is said that he livided between the church and the poor at this ime a valuable estate bequeathed to him by a vealthy Saxon lady, as well as his paternal nheritance. To this period of his life is also ttached the memorable legend of his conflicts vith the spirit of darkness, who is said to have ıssailed him often in his cell; till he one day aught the demon by the nose with a red-hot ɔair of pincers, after which he no more molested ıim. On the accession of Edmund, the brother and successor of Athelstan, he was again invited to court, and the rich abbey of Glastonbury was bestowed on him. He advanced still higher in the confidence of Edred, the next monarch, who made him his prime minister.

At the coronation feast of his successor, Edwy, this lordly ecclesiastic distinguished himself by a remarkable outrage on the person of the king. 'The popular account of this affair is, that the young prince had espoused a beautiful young lady of the royal blood, Elgiva, who was pronounced by the monks to be within the canonical degrees of affinity. Before his accession, therefore, she had been a source of dispute between the dignified ecclesiastics and the king. On the coronation-day he did not obtrude her claims upon the people; nor, on the contrary, would he forego his private comforts in her society. When the barons were indulging themselves in the pleasures of the feast, Edwy retired to his domestic apartments, and, in the company of Elgiva and her mother, laid aside his crown and regal state. Dunstan surmised the cause of his retreat; and taking with him his creature Odo, the nominal primate, penetrated into the interior of the palace, upbraided the prince with this untimely indulgence of his passions, and after branding his consort with the most opprobrious name of woman, brought him back with considerable violence into the hall. Mr. Turner, our able Anglo-Saxon historian, regards the transaction as a bold attempt of Dunstan to subdue the regal power to his ambition. He represents the nobility as evincing some displeasure at the king's early departure, and the anxiety of Odo to communicate the state of their minds to Edwy. That the persons he first addressed excused themselves from undertaking this errand: and the commission devolved by a sort of general wish on Dunstan, and Cynesius, a bishop, his relative. 'But with the delivery of the message,' he observes, 'his commission must have terminated; and on the king's refusal [if he did refuse] it was his duty to have retired. As an ecclesiastic, he should not have compelled him to a scene of inebriety; as a subject, it was treasonable to offer violence to his prince.'

'The latest, and not least able of our English historians, however, would place these events in a different light. He insists, somewhat in the spirit of the monkish writers, on this amour being highly disgraceful to the king; and while he represents it as 'the scandal of the age' (whose sources, in the king's disputes with the ecclesiastics, Mr. Lingard in any other instance would have readily traced), he states it as not altogether incredible that both Ethelgiva, the mother, and her daughter, whom he does not name, had sacrificed their honor to the equivocal ambition of one of them becoming queen. The nobles, he adds, accompanied their demand for the king's return with an injunction in the name of the whole assembly, for Ethelgiva to leave the court. The rest of his account does not materially differ from that of former historians. But with all the unfeigned respect for his impartiality, with which the perusal of this writer's volumes has inspired us, we cannot hold him successful

in this attempt to disengage the character of Dunstan and his associates from the imputation of great indecorum.

Were the lady the king's mistress, and not his wife, was a dignified ecclesiastic justified in following him into her apartments? and, had the amour been ever so unbecoming, was this a species of conduct likely to detach him from it? But the story of the wife and daughter together speculating upon his affections is surely improbable in the highest degree: we know that the monkish writers, who furnish the only account we have of the transaction, would call a wife, espoused in opposition to the will of the church, a mistress; and the sufferings of the young monarch from this interference with his affections, should teach us to exercise the judgment of charity on his memory.

Dunstan was now compelled to retire to Flanders, and this was a severe blow to the monks, who were expelled from several monasteries: but their sufferings were not of long continuance. For Edgar, the younger brother of Edwy, having raised a successful rebellion against the latter, and usurped his dominions north of the Thames, recalled Dunstan, and gave him the bishopric of Worcester, A. D. 957. From this time he was the chief confident and prime minister of king Edgar, who became A. D. 959 sole monarch of England. In 960 Dunstan was raised to be archbishop of Canterbury; and being thus possessed of the primacy, and assured of the royal support and assistance, he prepared to execute the grand design which he had long meditated, of compelling the secular canons to put away their wives, and become monks; or of driving them out, and introducing Benedictine monks in their room. With this view, he procured the promotion of Oswald to the see of Worcester, and of Ethelwald to that of Winchester: two prelates who were monks themselves, and animated with the most ardent zeal for the advancement of their order. These confederates, by their arts and intrigues, in the course of a few years, filled no fewer than forty-eight monasteries with Benedictines. But on the death of Edgar in 975 they received a check. The sufferings of the persecuted canons had excited much compassion; and many of the nobility, who had been overawed by the power and zeal of the late king, now espoused their cause, and promoted their restoration. Elfric, duke of Mercia, drove the monks by force out of all the monasteries in that extensive province, and brought back the canons, with their wives and children; while Elfwin duke of East Anglia, and Brithnot duke of Essex, raised their troops to protect the monks in these countries. To allay these commotions several councils were held: in which Dunstan was so hard pressed by the secular canons and their friends, that he was obliged to have recourse to miracles, we are told, to overcome their opposition. St. Dunstan died A. D. 988, in the sixty-fourth year of his age, having held the bishopric of London, together with the archbishopric of Canterbury, about twenty-seven years.

DUNWICH, a town in Suffolk, most of which is destroyed by the encroachments of the sea, and not one church left of eight. It has a market on Saturday; and still returns two members to parliament. The walls of the town enclose seven acres, and the remains of two gates are yet visible. It is thirty miles north-east of Ipswich, twenty-four south of Yarmouth, and ninety-nine north-east of London.

DUO, in music, a song or composition, to be performed in two parts only, one sung, the other played on an instrument, or by two voices. Also when two voices sing different parts, as accompanied with a third, which is a thorough bass. It is seldom that unisons and octaves are used in duos, except at the beginning and end.

DUODE'CUPLE, *adj.* Lat. *duo* and *decuplus*. Consisting of twelves.

Grisepsius, a learned Polander, endeavours to establish the *duodecuple* proportion among the Jews by comparing some passages of Scripture together.
Arbuthnot on Coins.

DU PAN (James Mallet), a modern political writer, was born at Geneva in 1749. He was appointed through the interest of Voltaire professor of belles lettres at Cassel, and in 1783 went to Paris. During the three years sitting of the first French assembly he published a respectable analysis of their debates. Being employed in 1792 on a confidential mission from Louis XVI. to his brothers, his estate, together with the whole of his personal property, was confiscated. He after this wrote at Brussels a work on the French Revolution, which was highly eulogised by Mr. Burke. He finally settled and carried on a journal in London, entitled Mercure Britannique. His death took place in May 1800.

DUPE, *v. a.* & *n. s.* Dr. Johnson says from Fr. *duppe*, a foolish bird, easily caught; but the verb, to dupe, is probably the root, and may be derived from Lat. *duplex*, double. To cheat; trick: one easily tricked or imposed upon.

An usurping populace is its own ***dupe***, a mere underworker, and a purchaser in trust for some single tyrant. *Swift.*

First slave to words, then vassal to a name,
Then *dupe* to party; child and man the same.
Duncan.

The throne a bigot keep, a genius quit;
Faithless through piety, and ***duped*** through wit.
Pope.

For, believe me, you will find, that in the opinion of the world there is not a fairer subject for contempt and ridicule, than a knave become the ***dupe*** of his own art. *Sheridan.*

I have not been thy *dupe*, nor am thy prey—
But was my own destroyer, and will be
My own hereafter.—Back, ye baffled fiends!
The hand of death is on me—but not yours!
Byron.

DUPIN (Lewis Ellis), a learned doctor of the Sorbonne, and one of the greatest critics of his time in ecclesiastical matters, was born at Paris, in 1657. When he published the first volume of his Bibliotheque Universelle des Auteurs Ecclesiastiques, in 1686, the liberty, with which he treated some ecclesiastical writers, gave such offence, that M. de Harlay, archbishop of Paris, obliged Dupin to retract many propositions, and suppressed the work. He was nevertheless suf-

ered to continue it, by altering the title from Bibliotheque Universelle, to Bibliotheque Nouvelle. This great undertaking, continued in several successive volumes, though sufficient to occupy the life of an ordinary man, did not hinder M. Dupin from publishing several other works. He was professor of philosophy in the royal college; but was banished some time from the chair to Chatelheraut, on account of the famous Cas de Conscience, but was restored, and died in 1719.

DU'PLICATE, *v. a., n. s.* & *adj.* } French
DUPLICA'TION, *n. s.* } *duplicata*,
DUPLICA'TURE. } from Lat.

duplex, duplicis, i. e. *duo*, two, and *plicatus*, from *plico*, to fold; twice folded; double. To make double, or enlarge by doubling; to fold; the second thing or number so added: for the arithmetical use of the adjective, see the example. Duplicature is synonymous with duplicate.

And some alterations in the brain *duplicate* that which is but a single object to our undistempered sentiments. *Glanville.*

What great pains hath been taken concerning the quadrature of a circle, and the *duplication* of a cube, and some other mathematical problems.
Hale's Origin of Mankind.

The lympheducts, either dilacerated or obstructed, exonerate themselves into the foldings, or between the *duplicatures* of the membranes.
Ray on the Creation.

Duplicate proportion is the proportion of squares. Thus, in a rank of geometrical proportions, the first term to the third is said to be in a *duplicate* ratio of the first to the second, or as its square is to the square of the second: so in 2, 4, 8, 16, the ratio of 2 to 8 is a *duplicate* of that of 2 to 4, or as the square of 2 to the square of 4. *Phillips. Harris. Bailey.*

It has been found, that the attraction is almost reciprocally in a *duplicate* proportion of the distance of the middle of the drop from the concourse of the glasses. *Newton.*

Nothing is more needful for perfecting the natural history of bodies, than the subjecting them to the fire; to which end I have reserved *duplicates* of the most considerable. *Woodward.*

The peritonæum is a strong membrane, every where double; in the *duplications* of which all the viscera of the abdomen are hid.
Wiseman's Surgery.

Will you give me leave to illustrate this affair of wit and judgment, by the two knobs on the back of my chair? Here stands wit—and there stands judgment. You see they are the highest and most ornamental parts of its frame—as wit and judgment are of ours, and like them too, indubitably both made and fitted to go together,—in order, as we say in all such cases of *duplicated* embellishments—to answer one another. *Sterne.*

Clandestine marriage. This kind of sea-weed is buoyed up by bladders of air, which are formed in the *duplicatures* of its leaves, and forms immense floating fields of vegetation; the young ones, branching out from the larger ones, and borne on similar little air-vessels. *Darwin.*

DUPLICATE, in law, used for the second letters patent, granted by the lord chancellor, in a case wherein he had before done the same; which were therefore thought void. But it is more commonly a copy or transcript of any deed or writing, account, &c., or a second letter, written and sent to the same party and purpose as a former, or a copy of despatches, for fear of a miscarriage of the first, or for other reasons.—4 *Car.* 2. c. 10.

DUPLI'CITY, *n. s.* Lat. *duplicis*. Doubleness; the number of two.

This *duplicity* was ill contrived to place one head at both extremes, and it had been more tolerable to have set three or four at one. *Browne's Vulgar Errours.*

Do not affect *duplicities* nor triplicities, nor any certain number of parts, in your division of things.
Watts's Logick.

DUPONDIUS, in antiquity, a weight of two pounds, or a money of the value of two asses. See As. As the as at first weighed a just pondo, or libra, the dupondius then weighed two; and hence the name. And though the weight of the as was afterwards diminished, and of consequence that of the dupondius also, yet they still retained the denomination. See LIBRA.

DUPORT (James), a learned English divine, was born in 1606, in Jesus' College, Cambridge, of which his father was master. He was educated at Westminster School, and at Trinity College, Cambridge, where he obtained a fellowship. In 1632 he was appointed regius professor of Greek; and, in 1641, made prebendary of Lincoln and archdeacon of Stow. He was deprived, in 1656, of his professorship for refusing the engagement, but recovered it at the Restoration, and resigned it again the same year in favor of Dr. Barrow. In 1664 he became D. D., and was promoted to the deanery of Peterborough. In 1668 he was elected master of Magdalen College. He died in 1679. His works are—1. Gnomologia Homeri. 2. Tres Libri Solomonis, Græco Carmine donati, 12mo. 3. Metaphrasis Psalmorum versibus Græcis contexta cum versione Lat. 4to. 4. Musæ Subsecivæ seu Poemata Stromata, 8vo. In 1712 some of his lectures were printed by Needham. His father was one of the translators of the Bible.

DUPORT (Marguerite Louis Francis du Tertre), was an advocate at Paris. In 1790 he was appointed minister of justice on the recommendation of La Fayette, and vainly endeavoured to adhere to the constitution which had been established. On the departure of Louis XVI. for Varennes, Duport went to the National Assembly, according to the king's directions, to deliver up the great seal; and when the representatives enjoined him to resume it, and seal the order for the arrest of that prince, being denounced anew, he gave in his resignation. He was however involved in the proscription of the 10th of August, 1792, and, being sent to Orleans, was condemned and executed in November, 1793, as an enemy to the liberty of the press. On hearing his sentence, he exclaimed, 'Revolutions destroy men; posterity will judge them.' Duport published, in conjunction with Kerverseau, the first eight volumes of a work, entitled L'Histoire de la Révolution, par deux Amis de la Liberté.

DUPPA (Brian), a learned English bishop, born in 1589, at Lewisham, in Kent, of which place his father was then vicar. In 1634 he was instituted chancellor of the church at Sarum, and soon after made chaplain to Charles I. He was appointed tutor to Charles, prince of Wales, and his brother James, duke of York; was made

bishop of Chichester; and, in 1641, translated to Salisbury, though the confusion that followed deprived him of all benefit from his promotion. Charles I. held him in high esteem, and he is said to have assisted the king in composing the Eikon Basiliké. On the Restoration he was made bishop of Winchester, and lord high almoner; but died in 1662. He bequeathed large sums to charitable purposes: and published a few sermons, with other religious pieces.

DURA MATER, from durus, hard, and mater, a mother; called dura from its comparative hardness with the pia mater, and mater from its being supposed to be the source of all the other membranes. Dura meninx, Dermatodes. A thick and somewhat insensible membrane, formed of two layers, that surrounds and defends the brain, and adheres strongly to the internal surface of the cranium. It has three considerable processes, the falciform, the tentorium, and the septum cerebelli; and several sinuses, of which the longitudinal, lateral, and inferior longitudinal, are the principal. See ANATOMY.

DURANGO, a town of Spain, in Biscay, famous for its manufacture of sword-blades and steel articles. Population 2800. Fifteen miles east of Bilboa.

DURANGO, or New Biscay, an intendancy of Mexico, extending from south to north from the mines of Guarisamey to the mountains of Carcay, north-west of the Presidio de Yanos, 232 leagues. Its breadth is unequal: near Parras it is scarcely fifty-eight leagues; but is taken on an average at sixty-three leagues. It does not appear to contain above 160,000 inhabitants, but, in this country, except through the details furnished by Humboldt in his New Spain, we are very little acquainted with this region. It is bounded on the south by New Galicia, or by the two intendancies of Zacatecas and Guadalaxara, on the south-east by a small part of the intendancy of San Luis Potosi, and on the west by the intendancy of Sonora. North and east it is bounded by an uncultivated country, inhabited by warlike and independent Indians. But since the end of the last century these troublesome neighbours have been on the decline. The intendancy comprehends the northern extremity of the great table land of Anahuac, which declines to the north-east towards the banks of the Rio del Norte. The ground around the city of Durango is about 1500 feet above the level of the sea. The extent of surface at this intendancy is 16,873 square leagues.

DURANGO, a town of Mexico, the chief city of the intendancy of that name, is situated in the southern part of New Biscay, 170 leagues north-west from the city of Mexico, and 298 from the town of Santa Fe. It is the residence of the intendant and of a bishop. The height of the ground on which the town is built is 6845 feet above the level of the sea. There are frequent falls of snow, and the thermometer sometimes descends to 14° of Fahrenheit. The population is estimated at 12,000. The surrounding country is fertile in corn and fruits, and the fine pastures abound with cattle.

DURANTA, in botany, a genus of the angiospermia order and didynamia class of plants; natural order fortieth, personatæ: CAL. quinquefid, superior: BER. tetraspermous: SEED, bilocular. Species, three; natives of the West Indies and South America.

DURANTE ABSENTIA (during absence), in law, is an administration granted when the executor is out of the realm, to continue in force until his return.

DURE, *v. n.*
DUR'ABLE, *adj.*
DUR'ABLENESS, *n. s.*
DUR'ABLY, *adv.*
DURA'TION, *n. s.*
DURE'FUL, *adj.*
DURE'LESS, *adj.*
DUR'ING, *prep.*
DUR'ITY, *n. s.*

Fr. *durer*; Span. and Port. *durable*; Lat. *durabilis*, from *durus*; Heb. קור, hard. To last; continue: durable is lasting; permanent: as is dureful: dureless is the opposite to these.

Duration and durity express a state of hardness or permanence: during is while any thing lasts.

For tho thingis that ben seien ben but *durynge* for a schort tyme, but tho thingis that ben not seen ben euer lastynge. *Wiclif. 2 Cor. iv.*

The *dureful* oak, whose sap is not yet dried,
Is long ere it conceive the kindling fire;
But when it once doth burn, it doth divide
Great heat, and makes his flames to heaven aspire.
Spenser.

Stones, though in dignity of nature inferior unto plants, yet exceed them in firmess of strength, or *durability* of being. *Hooker.*

No less *durable* and mighty is the seed of God in his children regenerate, than the seed of the serpent in the unregenerate, to move and rule the will of man accordingly. *MS. Note of Bradford the Martyr.*

Wit is brushwood, judgment timber: the one gives the greatest flame, the other yields the *durablest* heat; and both meeting make the best fire. *Overbury.*

The bones of his body we may compare to the hard rocks and stones, and therefore strong and *durable*. *Raleigh's History.*

Our times upon the earth have neither certainty nor *durability*. *Id.*

Yet were that aptitude natural, more inclination to follow and embrace the false and *dureless* pleasures of this stage-play world, than to become the shadow of God. *Id.*

Ancients did burn fragments of marble, which in time became marble again, at least of indissoluble *durity*, as appeareth in the standing theatres.
Wotton's Architecture.

With pins of adamant,
And chains, they made all fast; too fast they made
And *durable!* *Milton's Paradise Lost.*

Time, though in eternity, applied
To motion, measures all things *durable*
By present, past, and future. *Id.*

There indeed he found his fame flourishing, in monuments engraved in marble, and yet more *durably* in men's memories. *Sidney.*

Such a constitution as this would make the mighty Leviathan of a shorter *duration*, than the feeblest creatures, and not let it outlast the day it was born in. *Locke.*

If *during* his childhood he be constantly and rigorously kept from drinking cold liquor whilst he is hot, forbearance grows into a habit. *Id.*

Aristotle, by greatness of action, does not only mean it should be great in its nature, but also in its *duration*; that it should have a due length in it.
Addison's Spectator.

A bad poet, if he cannot become immoral by the goodness of his verse, may by the *durableness* of the metal that supports it. *Id. On Ancient Medals.*

The different consistence and *durableness* of the strata whereof they consist, are more or less.
Woodward.

Duration is a circumstance so essential to happiness, that, if we conceived it possible for the joys of heaven itself to pass from us in an instant, we should find ourselves not much concerned for the attainment of them. *Rogers.*

The glories of her majesty's reign ought to be recorded in words more *durable* than brass, and such as our posterity may read a thousand years hence.
Swift.

Extreme volatile and sprightly tempers seem inconsistent with any great enjoyment. There is too much time wasted in the mere transition from one object to another. No room for those deep impressions, which are made alone by the *duration* of an idea. *Shenstone.*

Though art may sometimes prolong their *duration*, it will rarely give them perpetuity.
Johnson. Plan of Dictionary.

Sir F. Pray, madam, do you speak as to *duration* of time; or do you mean that the story is tediously spun out? *Sheridan.*

Duration of Action, according to Aristotle, is confined to a natural day in tragedy; but the epopea, according to the same critic, has no fixed time. See Poetry.

DU'RANCE, } Fr. *duresse*, hardship, from
Du'resse. } Lat. *durus*, hard. See Durable. Applied particularly to constraint; imprisonment.

Thy Dol, and Helen of thy noble thoughts,
Is in base *durance* and contagious prison;
Hauled thither by mechanick dirty hands.
Shakspeare.

There 's neither iron bar nor gate,
Portcullis, chain, nor bolt, nor grate;
And yet men *durance* there abide,
In dungeons scarce three inches wide.
Hudibras.

Sick nature at that instant trembled round,
And mother earth sighed as she felt the wound;
Of how short *durance* was this new made state;
How far more mighty than heaven's love, her hate!
Dryden.

A poor, innocent, forlorn stranger, languishing in *durance*, upon the false accusations of a lying, insolent, whorish woman. *South.*

Notwithstanding the warning and example before me, I commit myself to lasting *durance*.
Congreve's Old Bachelor.

Duresse is a plea used, by way of exception, by him who, being cast into prison at a man's suit, or otherwise by threats, beating, &c., hardly used, seals any bond to him during his restraint. This the law holds as invalid, and supposes to be constrained. *Cowell.*

Our fame is in men's breath, our lives upon
Less than their breath; our *durance* upon days;
Our days on seasons; our whole being on
Something which is not us! *Byron.*

DURELL (David), a learned divine and critic, born in the island of Jersey, in 1728. He received his education at Pembroke College, Oxford, where he took his degrees in arts, but afterwards became fellow of Hertford College, of which he was appointed principal in 1757. He obtained the degree of D. D. in 1764, and about three years after a prebendal stall in the church of Canterbury. He died in 1775. He published, 1. The Hebrew Text of the Parallel Prophecies of Jacob and Moses, relating to the Twelve Tribes, with a Translation and Notes, &c. 4to. 2. Critical Remarks on the books of Job, Psalms, Ecclesiastes, and Canticles, 4to.: which is frequently referred to by bishop Horne, in his Commentary on the Psalms.

DURER (Albert), one of the first engravers and painters of his age, was descended of an Hungarian family, and born at Nuremberg, in 1471. He was also a man of letters and a philosopher; and was an intimate friend of Erasmus, who revised some of his works. He was one of the first improvers of the art of engraving. In many of those prints which he executed on copper, the engraving is elegant to a great degree. His 'hell scene,' in particular, which was engraved in 1513, is as highly finished a print as ever was engraved, and as happily executed. This artist understood the principles of design; his composition, too, is often pleasing; and his drawing generally good. But he knew very little of the management of light; and still less of grace: yet his ideas are purer than could well be expected from the awkward archetypes which his country and education afforded. In a word, he was a man of very extensive genius; and, as Vasari remarks, would have been an extraordinary artist, if he had had an Italian instead of a German education. His prints are very numerous. They were much admired in his own life-time, and eagerly bought up; which made his wife urge him to spend more time upon engraving than he was inclined to do. But he was rich; and chose rather to practise his art as an amusement than as a business. He died in 1527.

DURESS, durities, constraint, in English law, is more particularly applied to whatever is done by man to save either life or limb. If a man through fear of death or mayhem, is prevailed upon to execute a deed, or do any other legal act, though accompanied with all other requisite solemnities, it may be afterwards avoided. And the same is a sufficient excuse for the commission of many misdemeanours. There are two sorts of duress: duress of imprisonment, where a man actually loses his liberty; and duress per minas (by threats), where the hardship is only threatened and impending.

A man who was under duress of imprisonment, being an illegal restraint of liberty, until he seals a bond or the like, may allege this duress, and avoid the extorted bond. But if a man be lawfully imprisoned, and either to procure his discharge, or on any other fair account, seals a bond or deed, this is not by duress of imprisonment, and he is not at liberty to avoid it. 2 *Inst.* 482.

Duress per minas, is either for fear of loss of life, or else for fear of mayhem or loss of limb. And this fear must be upon sufficient reason: non suspicio cujuslibet vani et meticulosi hominis, sed talis qui possit cadere in virum constantem. Bract. l. 2. c. 5. A fear of battery (or being beaten) though never so well grounded, is no duress; neither is the fear of having one's house burned, or one's goods taken away and destroyed; because in these cases, should the threat be performed, a man may have satisfaction, by recovering equivalent damages; but no suitable

atonement can be made for the loss of life or limb. 2 *Inst.* 483.

D'URFEY (Thomas), an eminent English satirist and songster, whose name is well known, but of whose life few particulars are to be collected. He was born in Devonshire: but when, where, or of what family, are uncertain. He was bred to the law, which he forsook for the more agreeable employment of writing plays and songs; and the latter he had so happy a talent both of writing and singing, that he received many favors from persons of quality on that account. The writer of the Guardian, No. 67, tells us, he remembered to have seen Charles II. leaning on Tom D'Urfey's shoulder more than once, humming over a song with him. This indeed was not extraordinary in so merry a monarch; but even the phlegmatic king William could relax his muscles on hearing him sing. D'Urfey grew poor as he grew old, and prevailing on the managers of the playhouse to act his comedy of the Plotting Sisters, for his benefit, Addison wrote the above-mentioned paper in the Guardian, with another, No. 82, representing him in a good humored light, to procure him a full house. He died very old, in 1723.

DURHAM, a maritime county of England, is situated between the rivers Tees and Derwent, and along the German Ocean. It is bounded on the north by Northumberland, from which it is separated by the rivers Derwent and Tyne; on the east by the German Ocean; on the south by the river Tees, which divides it from Yorkshire; and on the west by Cumberland and Northumberland. Its form is triangular, extending forty-five miles in length, from its most western extremity, near the village of Kelhope, to Hartlepool on the east; and thirty-six in breadth, from the village of Stockburn in the south, to South Shields in the north. Though only a small part of the county is either of this length or breadth, it is nearly 180 miles in circumference. Its superficial area includes about 610,000 acres, containing four wards, one city, 120 parishes, ten market towns, and 230 villages. It is in the diocese of its own name, and is included in the northern circuit. Durham is divided into wards, and the archdeaconry comprehends four deaneries.

Before the Roman invasion Durham was inhabited by the Brigantes, but, after the conquest of this kingdom, it became part of the Roman province called Maxima Cæsariensis. The Anglo-Saxons included it in the kingdom of Northumberland. The etymology of the present name of this county appears to be derived, according to Bede, from dun a hill, and holm an island. It is usually called the bishopric of Durham, from the great power which the bishop of the diocese formerly possessed. It is, however, a palatine county, deriving its privileges from a grant made by Egfrid, king of Northumberland, in the year 685, of all the land betwixt the rivers Wear and Tyne, to St. Cuthbert, the apostle of the north, and to the ministers of his church for ever.

Speed remarks, that the air is sharp and very piercing, and would be more so, were it not that the vapors from the German Ocean help much to dissolve the ice and snow; yet the air is generally deemed healthy. It is milder and more pleasant towards the sea than in other parts. The general aspect is mountainous. A ridge of hills crossing the western angle has been denominated the English Appenines. They are not, however, extremely elevated. Of the soils of this county Granger says: near the river Tees, and in some spots bordering the other rivers and brooks in this county, the soil is loamy or a rich clay; at a further distance from these rivers and brooks, the soil is of a poorer nature, commonly termed watershaken, with here and there spots of gravel interspersed: but these are of small extent, the middle of none of them being half a mile from clay. The hills between the sea and an imaginary line drawn from Barnard Castle on the Tees, to Alansford on the Derwent, are for the most part covered with a dry loam, the fertility of which varies in proportion to its depth: from this line westward, the summits as well as the sides of the hills are moorish wastes. Mr. Bailey, in his Agricultural Report, remarks that the soils of this county vary in such insensible degrees, that it would be difficult to describe them in all their varieties. The principal distinctions, or heads of classification, may be taken as clay, loam, and peat. The south-east part of the county, from the Tees mouth to a few miles west of Stockton, and from thence by Redmarshal, Walviston, Elwich, and as far north as Hart, consists of a strong fertile clayey loam. To the westward of this, as far as Sedgefield, Trimdon, and Eppleton, and northward to near Sunderland, the soil is principally a poor stubborn unfertile clay. Of the loamy soils there are different varieties, as is the case with the clayey soils just mentioned. The deep, mellow, tenacious, dry, fertile, loams are in general found in the vicinity of rivers. The limestone district, extending from near Sunderland by Houghton-le-Spring, Kelloe, Coxhoe, Ferryhill, and to Merrington, is mostly a dry but not a productive loam. The peaty soils are most prevalent in the western parts, the greatest portion of the moors that have been enclosed being of this description.

Hartlepool, situated on a promontory, nearly encompassed by the German Ocean, which forms a capacious bay on the south side of the town, is advantageously placed for the reception of vessels, and landing of troops from the Continent. South Shields, also, sends out many vessels, and Stockton-upon-Tees is well situated for commerce.

The chief rivers which communicate with the sea are the Tyne, the Wear, and the Tees. The Tees rises in those vast moors which separate Yorkshire from Durham, Cumberland, Westmoreland, and Northumberland. Its course is at first rather inclined to the south-east, but below Darlington it turns abruptly to the north-east, and falls into the sea below Stockton in this county, which may be called its port. The Wear rises in the same wild moors, but considerably to the north of the Tees. Its course is almost parallel with it, bearing at first to the south-east, and at Bishop's Auckland turning to the north-east; after nearly surrounding the city of Durham, it flows northward to Chester-le-Street, and then inclines a little towards the east, to reach its port of Sunderland. The Wear, Mr Skrine calls the miniature of the Tees, much

resembling that river in character, though greatly its inferior in width and rapidity. The Tyne, strictly speaking, belongs to Northumberland, though it has its source in the Durham Moors. The fish in these rivers are salmon, trout, eels, dace, pike, and spartings in the Tees. The salt springs near Birtley, and the spas at Butterby and Dinsdale, are also deserving of notice. Near the water-gate, at the south side of the town of Hartlepool, is a chalybeate spring, covered every tide by the sea, and slightly impregnated with sulphur.

The mineral productions of Durham are numerous and valuable.—The coal districts, in particular, are extensive in various parts of the county. Mr. Bailey has enumerated thirty-four collieries, which he calls Watersale Collieries, and thirty-five which he calls Landsale Collieries. From these lists it appears that the quantity of coals obtained in this county annually is 1,480,080 chaldrons of thirty-six bushels; 10,650 men are employed. In the year 1809 there were eighty-six lead-mines working in this county. Of these, twenty-three belonged to the bishop of Durham; forty-seven, being all the mines in Teesdale, except one, to the earl of Darlington. Iron ore is found in abundance in the western parts of the coal district. The county, also, produces various kinds of excellent stone for chimney-piece ornaments, mill-stones, grind-stones, &c.; as also fire-stone for ovens, furnaces, &c., and freestone for building; as also gray slates for roofing, &c. The cattle of Durham are in much repute; as for form, weight, produce of milk and butter, and quickness of fattening, they are equal to any in England.

Durham sends four members to parliament: viz. two for the county, and two for the city of Durham. This county was the birth-place of Sir John de Baliol, founder of Baliol College, Oxford, born at Barnard castle, 1248; the venerable Bede, born at Wearmouth, or more probably at Iscomb, 672, died 735; Dr. Sir Samuel Garth; Joseph Reed, a dramatic writer; Rev. W. Romaine, a Calvinistic clergyman of the established church; Dr. Richard Grey, author of Memoria Technica, and many other works on theology, &c.

In this county are manufactures of all kinds of wrought iron, foundries for casting iron and brass, glass-houses, potteries, salt, copperas, sal-ammoniac, coal tar, woollen, cotton, and linen; some silk ribbon, and paper-mills. It abounds in noblemen's and gentlemen's seats.

Here are, likewise, several natural and artificial curiosities worth the notice of travellers: as. the black halls, near Hartlepool, consisting of clusters of rocks, formed by the force and constant action of the waves of the sea, which have created several fine pointed archways and vast towers, resembling those of a cathedral. At Oxenhall are some of those curious cavities called hell-kettles; the diameter of the largest is 114 feet, and that of the least seventy-five feet.

Kepier hospital, near Durham, founded in 1112, has only part of the gateway standing, a strong and handsome piece of masonry with pointed arches. Remains of several monastic buildings occur near the church at Monk Wearmouth; that of Jarrow may still be traced in its ruins on the summit of an elevated ridge near the church; and the ruins of a monastery for grey friars may be seen at Hartlepool. On the east side of the main street of Gateshead are the ruins of St. Edmund's monastery, established, according to Bede, before the middle of the seventh century; and Finchall priory, once beautifully situated in a vale on the banks of the Wear, covers with its ruins an extensive plot of ground. The principal existing ecclesiastical buildings are—Sedgefield church, in the Saxon style; Bishop Wearmouth church, supposed to have been founded by Athelstan; the parish church of Brancepeth, an ancient structure of the conventual form; and the cathedral of Durham, begun in 1093, in the Saxon and Norman style.

Durham is also rich in civil architecture and remains: amongst the most conspicuous are Hilton castle, an ancient baronial residence of a family of that name, situated on the north side of the Wear, about three miles from Wearmouth; its form is an oblong square, the interior consisting of five stories. Ravensworth castle, which seems anciently to have formed a quadrangle, having four square towers, connected by a curtain wall; two of the towers are built up, and the others are in ruins. Brancepeth castle, an irregular stately pile, erected about Stephen's reign. Lumley castle, about a mile to the east of Chester-le-Street, a seat of the earl of Scarborough; it is a quadrangle, with an area in the centre, and at each angle are projecting turrets of an octangular form. Bishop Auckland's castle, standing on the north angle of the town, and covering with its courts and offices about five acres of ground. Raby castle, the magnificent seat of the earl of Darlington, enlarged on the basis of a more ancient castle which stood here prior to the year 1379. Barnard castle, situated on the southern acclivity of an eminence, rising with a steep ascent from the river Tees. And the castle of the county town. See DURHAM, the city.

Roman coins have been dug up at Gateshead, on Fulwell Hill, and at South Shields, which was clearly the ad finem of Richard of Cirencester's Itinerary. Binchester, the seat and manor of the Wren family, is the site of the Roman station Vinovium; and Evchester is supposed to be the Vindomara of Antoninus, many Roman inscriptions, and an urn of uncommon form, having been found here. The latter was nearly a yard high and seven inches wide, having in the centre a small cup. Chester-le-Street has been supposed to be the Condercum of the Romans. It is situated on the military way leading to Newcastle. Glanibanta, near Lanchester, is another, and remarkably distinct Roman station. It is of an oblong figure, 174 paces from north to south, and 160 from east to west, within the vallum, which occupies a beautiful eminence. In some parts, the wall remains perfect; the outside is perpendicular, twelve feet in height, built of ashler work in regular courses, each stone being about nine inches thick, and twelve long. The site of the Pretorium is very distinctly to be traced.

Three miles west of the city of Durham, and to the right of the road, is Brandon, a village

situated in the vicinity of a high hill. On the summit is a remarkable tumulus, of an oblong form, 120 paces in circumference at the base, and about twenty-four feet in perpendicular height; but it does not appear that this tumulus was ever opened. It is now covered with a thick plantation of fir, and seems a relic of British antiquity. Near Eggleston is an ancient structure, called the Standing Stones, also of this class: it originally consisted of a cairn in the centre, surrounded by a trench, and encompassed by a circular arrangement of rough stones; many of which have been removed and broken to repair the roads.

Durham is termed a county palatine (à palatio) because the owners thereof had, in this county, the authority to use the royal prerogative as fully as the king had in his palace. Its privileges are thought to have been originally granted to the county, on account of its bordering so near upon Scotland, in order that the inhabitants, having justice administered at home, might not be obliged to go out of their county and leave it open to the enemy. The bishopric of Durham was dissolved, and the king to have all the lands, &c., by a statute (7 Ed. VI.) not printed. But this act was afterwards repealed (1 Mary, stat. 3, c. 3), and the bishopric newly erected, with all jurisdiction ecclesiastical and temporal annexed to the county palatine. The justices of the county palatine of Durham may levy fines of lands in the county; and writs upon proclamation, &c., are to be directed to the bishop. (Stats. 5 Eliz. c. 27, 31 Eliz. c. 2). Writs to elect members of Parliament in the county palatine of Durham, also go to the bishop or his chancellor, to be returned by the sheriff, &c. There is also a distinct court of chancery in this county; and the bishop is at the head of the whole administration of justice.

DURHAM, a principal city of England, the capital of the foregoing county, is sixteen miles south from Newcastle, and 259 north from London. This city was founded in 995, on the monks of Landisfarne removing to this spot, and making it the sacred depository of the relics of St. Cuthbert. It is nearly surrounded by the river Wear. Its situation, and the venerable appearance of its public buildings, strike the eye very agreeably at the southern entrance of the city. Altogether it is about a mile square, and is well paved, watched, and lighted. The municipal government is vested in a mayor, recorder, twelve aldermen, twenty-four common-council-men, who are chosen from twelve chartered trading companies, and an indefinite number of freemen: the corporation and freemen amounting in the whole to about 1000 electors, who return two members to parliament.

The cathedral and castle occupy the crown of an eminence, eighty feet perpendicular from the river, and enclosed by the remains of the old city walls. At the bottom flows the Wear. The slope of the hill is decorated with hanging gardens and rich meadows, and the opposite banks are clothed with wood and fruit trees. The cathedral is itself 411 feet long, the length of the nave 200 feet, and the width seventy-four; the great cross-aisle has an aisle towards the east, at both ends, 170 feet in length, and fifty-seven wide; the middle tower is 214 feet high. It is divided into five aisles by four rows of pillars. The pillars are vast cylinders, twenty-three feet in circumference, and, with the whole of the interior, are adorned with carvings, exhibiting fine specimens of the early Norman style. Near the west end is the font, an elegant marble basin, ornamented with carved red-oak. The oak-skreen at the entrance of the choir, as well as the bishop's throne, and the stalls for the bishop, dean, and prebendary, are finished in a magnificent style. The founder's tomb is on the south side of the throne. The beautiful mutilated screen, on the eastern side of the choir, was the gift of John lord Neville. Behind the high-altar stood the shrine of St. Cuthbert, once the richest in England. The north aisle of this cathedral is now used as a register-office for wills. In 1782 several parts of this structure being found in a ruinous condition, they were restored with considerable taste. The Galilee, or St. Mary's chapel, at the west end of the cathedral, is said to have been built as a place of worship for those females who were not allowed to enter the cathedral. The old Frater House is converted into an elegant library. The College is an oblong square, containing the deanery and prebendal houses. The kitchen here is curious, and at the upper end of it is a beautiful fountain. On the north side of the church-yard is the grammar-school, and the master's house.

Durham has six other churches, namely, St. Oswald's, an ancient structure, with a curious vaulted roof of wood, and some fine painted glass: St. Nicholas, an ancient but plain edifice, at which the corporation attend divine service: St. Mary-le-bow, built of hewn stone, in 1685; here the bishop and archdeacon's visitations are held: and St. Margaret's, St. Giles's, and Little St. Mary's. In the city are two Roman Catholic chapels, a quakers', presbyterian, methodist, and other meeting-houses.

On the Palace-Green stands the castle, first erected by William the Conqueror, and part of which has been repaired, and made the residence of the bishop occasionally. The great tower stands upon an artificial mount, and is of an irregular octagonal form, sixty-three feet in diameter. It formerly contained four tiers of apartments, but nothing now remains of it except the vaults, and part of the keep. Round the mount are three delightful terraces.

The market-place is large and spacious; in the centre is an excellent fountain, from which the inhabitants are supplied with water. A spacious piazza has been built, where the market for corn, provisions, &c., is held. Near it is the Guildhall, where the public meetings are convened. Among the recent improvements, are a new gaol, house of correction, county-courts, and governor's house. There are three stone bridges in this city. The New bridge was finished in 1777, at the expense of the dean and chapter. Framwellgate bridge consists of two elliptic arches, and crosses the canal. Elvet bridge is at the southern entrance to the city. Between the New bridge and St. Oswald's church are the public walks called the Banks,

which afford an agreeable retreat in fine weather. An extensive cloth and carpet manufactory has been established, from funds bequeathed by a Mr. Smith, which affords employment to a great number of men and boys. A county infirmary is also well supported. In the town are many public charities, a subscription library, and several other literary and useful institutions. A neat little theatre was erected in 1791, and annual races are held in July.

Durham market on Saturday is well supplied with corn and all kinds of provisions. Sea fish are brought from Hartlepool and Sunderland. Fairs are held on the 31st of March, for cattle; Whit-Tuesday, for sheep and swine; and on the 15th of September, for horses; they each continue three days.

About half a mile eastward are the remains of a fortification called Old Durham and Maiden castle; and two miles and a half east stands Sherborn House, an hospital founded by bishop Pudsey, for a master and sixty-five lepers; in which are now maintained fifteen in-brethren, each having a separate room, good diet, a suit of clothes annually, and 40*s.* in money: there are also fifteen out-brethren. In a deep vale, near the river, are the ruins of Finchall Abbey, founded in 1196 for Benedictines. On the west of the city is an old cross, erected by Ralph, lord Neville, in memory of a battle between the English and Scots, wherein the latter were defeated with the loss of 15,000 men, and their king David II. taken prisoner.

DURHAM, a township of Connecticut, in New-Haven county, settled from Guildford, in 1698, and incorporated in 1708. It is about twenty-two miles south-west of Hartford, and eighteen north-east of New-Haven. It was called Cagingchague, by the Indians; which name a small river that chiefly rises here still bears.

DURHAM, a township of the United States, in Cumberland county, district of Maine, on the south-west bank of the Androscoggin, which separates it from Bowdoin on the north-east. It lies 145 miles north-east of Boston.

DURHAM, a post town of New Hampshire, in Strafford county, seated on Oyster river, near where it joins the Piscataqua; twelve miles west of Portsmouth. It was incorporated in 1633. It was formerly a part of Dover, which adjoins it on the north, and was called Oyster River. On the top of a hill in this town is a rock, computed to weigh sixty or seventy tons, so exactly poised on another rock, as to be easily moved by one's finger. Its situation appears to be natural.

DURIO, in botany, a genus of the polyandria order, and polyadelphia class of plants: CAL. a monophyllous perianth: COR. petals five growing to the calyx; stamina conjoined in five bodies; germ. roundish; style bristly, the length of the stamina: FRUIT a roundish apple every where muricated: SEED containing mucous orilla. Species one only, a native of the East Indies.

DURLACH, a well built town of Germany, formerly the capital of the margraviate of Baden-Durlach, now of the circle of the Pfinz and Enz, in the grand duchy of Baden. It is situated on the Pfinz, at the foot of a long and lofty range of mountains called the Thurmberg. It was burnt down in 1689, and, though rebuilt at the peace, never regained its prosperity. It contains 4000 inhabitants, for the most part Lutherans. Here is the ducal castle of Carlsburg, an elegant church, and an academy; but the seat of government has been removed to Carlsruhe. It is remarkable for its manufactory of porcelain. A considerable trade is also carried on in corn, madder, and tobacco. Durlach is five miles east of Carlsruhe, fifteen north-east of Rastadt, and thirty-two N. N. W. of Stutgard.

DUROBRIVÆ, in ancient geography, a town of the Catyeuchlani, in Britain, now in ruins; which lies on the Nen, between Castor and Dornford, in Northamptonshire, on the borders of Huntingdonshire.

DUROBRIVÆ, or DUROCOBRIVÆ, a town of the Trinobantes, in Britain; whose ruins are situated between Flamstead and Redburn, in Hertfordshire. See CATTI.

DUROBRIVIS, an ancient town of Britain, twenty-five miles west of Durovernum, or Canterbury; now called Rochester, which, in the charter of the foundation of the church, is styled Durobrevis.

DUROC (Marshal), duke of Friuli, was born at Pont-a-Mousson in 1772, and studied in the military school of that place. His father, who was a notary, intended him for that employment; but in 1792 he became a lieutenant of artillery, and soon after emigrated into Germany. Returning home, we find him aid-de-camp to general Lespinasse, and engaged in that capacity, in his first revolutionary campaigns. In 1796 he was appointed aid-de-camp to Buonaparte, in Italy, and distinguished himself at the passage of the Isonzo. He was also in the expedition to Egypt; and being wounded by a cannon-ball, at the siege of Acre, returned with Buonaparte to France. Duroc after this had several important missions to Berlin, Stockholm, Vienna, and St. Petersburgh; in which he is said to have been remarkably successful. He was a great favorite with Napoleon, and an adroit diplomatist; but he never acquired much military renown. He was killed by a cannon-ball at Wartschen, May 22d, 1813.—*Biog. Univ.*

DUROA, in botany, a genus of the monogynia order and hexandria class of plants: CAL. cylindrical and loped above; the border six-parted; there are no filaments; FRUIT a hispid apple. Species one only, a Surinam tree.

DUROTRIGES, an ancient British nation, scattered in that part of the country which is now called Dorsetshire. Their name is derived from the two British words dur, water, and trigo, to dwell; and they got it from the situation of their country, which lies along the sea coast. It is not certain whether the Durotriges formed an independent state under a prince of their own, or were united with their neighbours the Danmonii; as they were reduced by Vespasian under the dominion of the Romans, at the same time, and with the same ease, and never revolted. Dorchester, its present capital, seems to have been a Roman city of some consideration, though our antiquaries are not agreed about its Roman name. It is most probable, that it was the Dur-

novaria, in the twelfth Iter of Antoninus. Many Roman coins have been found at Dorchester; the military way called Jenning Street passed through it; and some vestiges of the ancient stone wall with which it was surrounded, and of the amphitheatre with which it was adorned, are still visible. The country of the Durotriges was included in the Roman province called Flavia Cæsariensis, and governed by the president of that province, as long as the Romans kept any footing in these parts.

DURY (John), usually called Duræus, a learned and sanguine divine of the seventeenth century, who, conceiving the project of a union of the reformed churches, obtained leave to travel from place to place in order to bring about this event. He was a native of Scotland, and obtained the countenance of archbishop Laud, and the prelates Bedell and Hall; but, although he met with encouragement in various parts of the continent, it is needless to say that he failed in his plans. And after this he undertook an explanation of the Apocalypse, which was to reunite every order of Christians. He died in 1675.

DUSK, *adj.*, *n. s.*, *v. a.* & *v. n.* } Sued.-Goth.
DUSK'ILY, *adv.* } *dyster*; Goth.
DUSK'ISH, *adj.* } *daucks*; Dut.
DUSK'ISHLY, *adv.* } *dugster*; Teut.
DUSK'Y, *adj.* } *dus*; Gr. δασκιος, from δασυς, thick, and σκια, shadow. Dark; gloomy in color or general appearance; tendency to darkness; to make or grow dark.

Dusked his eyen too, and failled his breath.
Chaucer.

From his infernal furnace forth he threw
Huge flames, that dimmed all the heaven's light,
Enrolled in *duskish* smoke, and brimstone blue.
Spenser.

Here lies the *dusky* torch of Mortimer,
Choked with ambition of the meaner sort.
Shakspeare.

It is not green, but of a *dusky* brown colour.
Bacon.

The sawdust burned fair, till part of the candle consumed: the dust gathering about the snast, made the snast to burn *duskily*. *Id. Natural History.*

Sight is not contented with sudden departments from one extreme to another; therefore rather a *duskish* tincture than an absolute black.
Wotton's Architecture.

Only, may the Good Spirit of the Almighty speedily dispell all those *dusky* prejudices from the minds of men, which may hinder them from discerning so clear a light. *Bp. Hall. Letter from the Tower.*

The hills, to their supply,
Vapour and exhalation, *dusk* and moist,
Sent up amain. *Milton's Paradise Lost.*

Some sprinkled freckles on his face were seen,
Whose *dusk* set off the whiteness of the skin.
Dryden

There fierce winds o'er *dusky* valleys blow,
Whose every puff bears empty shades away. *Id.*

I will wait on you in the *dusk* of the evening with my show upon my back. *Spectator.*

Through the plains of one continual day,
Six shining months pursue their even way;
And six succeeding urge their *dusky* flight,
Obscured with vapours and o'erwhelmed in night.
Prior.

The surface is of a *dusky* yellow colour.
Woodward.

While he continues in life, this *dusky* scene of horrour, this melancholy prospect of final perdition, will frequently occur to his fancy. *Bentley's Sermons.*

Umbriel, a *dusky*, melancholy sprite,
As ever sullied the fair face of light,
Down to the central earth, his proper scene,
Repairs to search the gloomy cave of Spleen.
Pope.

By mixing such powders, we are not to expect a strong and full white, such as is that of paper; but some *dusky* obscure one, such as might arise from a mixture of light and darkness, or from white and black; that is, a grey, or dun, or russet brown.
Newton's Opticks.

Less bold, Leander at the *dusky* hour
Eyed, as he swam, the far love-lighted tower;
Breasted with struggling arms the tossing wave,
And sunk benighted in the watery grave. *Darwin.*

Hark! through the silence of the cold, dull night,
The hum of armies gathering rank on rank!
Lo! *dusky* masses steal in dubious sight
Along the leaguered wall and bristling bank
Of the armed river, while with straggling light
The stars peep through the vapours dim and dank,
Which curl in curious wreaths. *Byron.*

DUSSARA, a fortified town of Hindostan, in the province of Gujerat. It is surrounded with twelve villages, and is the property of a Mahommedan zemindar, of Arabian descent. One of his ancestors who was put to death about A. D. 1209, by the rajah of Hulwad, for having committed gowhattia (cow-killing), is held in great veneration as a saint, by the adjacent Mahommedan inhabitants. His tomb is on the banks of a large tank in the neighbourhood, which is well cultivated. A force of about 2000 excellent cavalry is maintained here.

DUSSAULX (John), a French writer, born at Chartres in 1728. He was a military man in early life, but quitted the army for literary pursuits. At the beginning of the revolution he became a member of the convention; and of the council of ancients. He died in 1799. His works are, 1. A Translation of Juvenal, 8vo. 2. De la Passion de Jeu, 8vo. 3. Sur la Suppression des Jeux de Hazard. 4. Eloge de l'Abbé Blanches. 5. Memoire sur les Satiriques Latins. 6. Voyage à Barrege, et dans les hautes Pyrennées, 8vo. 7. Mes rapports avec J. J. Rousseau, 8vo.

DUSSELDORF, or DUSSELDORP, a city of Westphalia, now belonging to Prussia, in the duchy of Berg, situated on the river Dussel, near its confluence with the Rhine. It is strong and well built, the elector palatine having in the early part of the eighteenth century exempted from taxes for thirty years whoever should build a house within its walls. It was taken by the French in September 1795, when the castle was greatly damaged; but it has since been repaired, and contains a celebrated gallery of paintings, which after being removed, and for some time kept at Munich, was brought back here. It is said to comprise the chef d'œuvres of Rubens, Vandyk, Vanderwerf, and the Flemish masters. Here are also several elegant churches, an excellent market-place, extensive barracks, and pleasant public walks. Dusseldorf has the academy removed hither from Duisburg in 1806, and a school for painting: it has also a collection

of casts, a physical cabinet, and a mechanographic establishment. Corn, and the local manufactures of cloth, paper-hangings, glass, and leather are its chief articles of trade. Population about 19,000. The fortifications were demolished after the peace of Luneville in 1801. It became, in 1806, the residence of the grand duke of Berg, and the seat of his government; but, in 1815, it was made over with the rest of that state to Prussia, and is now the capital of a circle with 364,000 inhabitants. Twenty miles N.N.W. of Cologne, thirty north-east of Aix-la-Chapelle, and sixty-two south-west of Munster.

DUST, *n. s.* & *v. a.* } Goth. and Sax. *dust;*
DUST'MAN, *n. s.* } Dan. *dyst;* Belg. *doust;*
DUST'Y, *adj.* } Erse, *duist.* Earth, or earthy matter; hence a mean, low state; the grave: to scatter, and to free from, dust.

And whanne thei crieden and kesten awei her clothis and threwen *dust* into the eir, the tribune commaundide him to be led into the castels and to be betun with scourgis. *Wiclif. Dedis.* 22.

God raised up the poor out of the *dust*, to set them among princes. 1 *Sam.* ii. 8.

All our yesterdays have lighted fools
The way to *dusty* death. *Shakspeare.*
The sceptre, learning, physick, must
All follow this, and come to *dust.*
Id. Cymbeline.

Dust helpeth the fruitfulness of trees, insomuch as they cast *dust* upon them: that powdering, when a shower cometh, maketh a soiling to the tree, being earth and water finely laid on.
Bacon's Natural History.

A good heart will rather lie in the *dust*, than rise by wickedness. *Bp. Hall. Contemplations.*

Thou
Out of the ground wast taken, know thy birth;
For *dust* thou art, and shalt to *dust* return. *Milton.*
Proclaim the truth, say what is man!
His body from the *dust* began;
And when a few short years are o'er,
The crumbling fabric is no more.
Cotton. Visions in Verse.

Arms and the *dusty* fields I less admire,
And soften strangely in some new desire. *Dryden.*

And therefore I am no more troubled and disturbed with all the *dust* that is raised against it, than I should be to see from the top of a high steeple, where I had clear air and sunshine, a company of great boys or little boys (for it is all one) throw up the *dust* in the air, which reached not me, but fell down in their own eyes. *Locke.*

Vain wretch, suppress thy knowing pride,
Mortify thy learned lust:
Vain are thy thoughts while thou thyself art *dust.*
Prior.

The *dustman's* cart offends thy clothes and eyes,
When through the street a cloud of ashes flies.
Gay.

Even Drudgery himself,
As at the car he sweats, or *dusty* hews
The palace stone, looks gay.
Thomson's Summer.

When stretched in *dust* her gasping panthers lie,
And writhed in foamy folds her serpents die.
Darwin.

You a soldier!—you're a walking block, fit only to *dust* the company's regimentals on! *Sheridan.*

So revolves the scene;
So Time ordains, who rolls the things of pride
From *dust* again to *dust!* *Byron.*

DUTCHESS, Fr. *duchesse;* Ital. *ducessa;* from the low Latin formation *(ducissa)* of *dux, ducis,* a general. The lady of a duke.

For certes, lord, ther n' is non of us alle
That she n' hath ben a *duchesse* or a queene;
Now be we caitives, as it is wel sene.
Chaucer. Cant. Tales.

The duke of Cornwall, and Regan his *dutchess,* will be here. *Shakspeare. King Lear.*

The duke was to command the army, and the *dutchess,* by the favor she possessed, to be near her majesty. *Swift.*

The gen'rous god who wit and gold refines,
And ripens spirits as he ripens mines,
Kept dross for *dutchesses,* the world shall know it,
To you gave sense, good humour, and a poet. *Pope.*

DUTCHESS COUNTY, a county of New York, on the east side of Hudson River. It has the state of Connecticut on the east, West Chester on the south, and Colombia county on the north. It is about forty-eight miles long and twenty-three broad, and contains fifteen town-ships, of which Poughkeepsie and Fish-Kill are the chief. Dutchess county sends seven representatives to the assembly of the state. In 1792 a remarkable cavern was discovered in the county, at a place called by the Indians Sepascot, at Rhynbeck. The northern part is mountainous, and the eastern hilly, with occasional lofty summits, while the remainder presents a surface much broken. Its agriculture is in the most improved state, and in manufactures it has also made considerable progress. Iron ore abounds, and some ores of copper, zinc, tin, lead, and silver, have been found.

DUTCHY, *n. s.* Fr. *duché.* The territory of a duke.

Different states border on it: the kingdom of France, the *dutchy* of Savoy, and the canton of Bern. *Addison on Italy.*

France might have swallowed up his whole *dutchy.*
Swift.

DUTENS (Louis), was born in France in 1729, and obtained orders in the church of England; he was appointed chaplain to the embassy at Turin, where he also held for some time the situation of chargé des affaires. In 1766 he published at Paris his Recherches sur l'Origine des Decouvertes, of which a translation soon appeared in London. The same year he was presented to the rectory of Elsdon in Northumberland. In 1768 he travelled with lord Algernon Percy; and while abroad published an edition of Leibnitz, in 6 vols. 4to. He died in 1812. He published besides the above: 1. Explications des quelques Medailles des Grecques et Pheniciennes, 4to. 2. Journal d'un Voyage aux Villes Principales de l'Europe. 3. Histoire de ce qui s'est passe pour etablissement d'une Regence en Angleterre, 8vo. 4. Recherches sur le tems reculé de l'usage des Voûtes chez les Ancieus. 5. Memoires d'un Voyageur, 5 vols.: this he likewise published in English. He also wrote the French text of the second volume of the Marlborough Gems.

DUTTAR, a district of the Seik territories, Hindostan, in the province of Lahore, situated between the thirty-first and thirty-second degrees of north latitude. The chief towns are Begwarah, Horizpoor, and Malpoorah.

DUTY, in the military art, is the exercise of those functions that belong to a soldier; with this distinction, that mounting guard and the like, where there is no enemy directly to be engaged, is called duty; but marching to meet and fight an enemy is called going on service.

DUTY, in polity and commerce, signifies the impost laid on merchandises, at importation or exportation, commonly called the duties of customs; also the taxes of excise, stamp-duties, &c. Peculiar duties once laid upon aliens are now repealed. See CUSTOMS.

DUVAL (Valentine Jamerai), a person of uncommon natural talents and singular fortune, born in the province of Champagne, in 1695. After serving a farmer and shepherd several years, when about eighteen years of age he became keeper of the cattle belonging to hermits of St. Anne, near Luneville. Here he took every opportunity of purchasing books, with what money he received, and attending to the instructions of these brothers, under whom he made a rapid progress in his studies. In this situation, he was accidentally discovered by two noblemen, while he was studying geography, under a tree, and they were so pleased with his conversation, that they introduced him to the duke of Lorraine, who placed him in the college of Pont a' Mousson. The duke afterwards appointed him his librarian, and gave him the professorship of history in the academy of Luneville. He now gratefully remembered his original benefactors by rebuilding the hermitage of St. Anne, and adding a chapel and some ground to it. In 1738 he followed the grand duke Francis to Florence, and on the marriage of that prince, with the heiress of the house of Austria, he accompanied him to Vienna, where the emperor took a great delight in his conversation, and made him keeper of his cabinet of medals. He died in 1775.

DUUMVIRATE, the office or dignity of the duumviri. See the next article. The duumvirate lasted till A. U. C. 388, when it was changed into a decemvirate. See DECEMVIRI.

DUUMVIRI, in Roman antiquity, a general appellation given to magistrates, commissioners, and officers, where two were joined together in the same functions: such as, 1. Duumviri capitales, the judges in criminal causes. From their sentence it was lawful to appeal to the people, who alone had the power of condemning a citizen to death. These were taken from the body of the decuriones: they had great power and authority, were members of the public council, and had two lictors to walk before them. 2. Duumviri municipales, two magistrates in some cities of the empire, answering to what the consuls were at Rome. They were chosen out of the body of the decuriones; their office lasted commonly five years, upon which account they were frequently termed quinquennales magistratus. Their jurisdiction was of great extent; they had officers who walked before them, carrying a small switch in their hands; and some of them assumed the privilege of having lictors, carrying axes and the fasces, or bundles of rods, before them. 3. Duumviri navales, two commissaries of the fleet, first created at the request of M. Decius, tribune of the people, in the time of the war with the Samnites. Their duty consisted in giving order for the fitting out of ships, giving commissions to marine officers, &c. 4. Duumviri sacrorum, two magistrates created by Tarquin II. for performing the sacrifices, and keeping the Sibyls' books. They were chosen from among the patricians, and held their office for life; they were exempted from serving in the wars, and from the offices imposed on the other citizens; and without them the oracles of the Sibyls could not be consulted.

DUXBOROUGH, a town of Massachusetts, in Plymouth county, with a harbour for small vessels, and a light-house at the south extremity of the beach. It is situated south by east of Plymouth, three miles across Plymouth Bay.

DUYIVELAND, DUYVELAND, or DIVELAND, an island of the late Batavian republic, in the department of the Meuse, and ci-devant province of Zealand, lying south-east of Schonen, from which it is separated by a narrow channel. It is nine miles long from west to east, and six broad.

DWARACA (the gate), a town and celebrated temple in the province of Gujrat, Hindostan, situated at the south-west extremity of the Peninsula. It has twenty-one dependent villages belonging to Dwaraca, containing 2560 houses, and a population of about 10,240 souls subject to it. This place is, at present, possessed by Mooloo Manick, who is more powerful than any other of the Oacka chieftains. The sacredness of the place attracts a rich and numerous population, and presents a safe asylum from danger. By an agreement of the 14th of December, 1807, Mooloo Manick Sumyanee, of Dwaraca, engaged with the British government not to permit, instigate, or connive at any act of piracy committed by any person under his authority; and also to abstain from plundering vessels in distress. On their part, the British engaged to afford the temple at Dwaraca every suitable protection and encouragement; a free and open commerce to be permitted to vessels paying the regulated duties.

'The original and most sacred spot in this quarter of India,' says Mr. Hamilton, 'is Dwaraca; but, about 600 years ago, the valued image of their god Runchor (an incarnation of Krishna), by a manœuvre of the brahmins, was conveyed to Daccoor, in Gujrat, where it still remains. After much trouble, the brahmins at Dwaraca substituted another in its stead, which, unfortunately, also took a flight across a narrow arm of the sea, to the island of Bate, or Shunkodwar, about 130 years ago, and another new one was placed in the temple here.

'Dwaraca is also designated by the name of the island; and, having been long the residence of Krishna, the favorite Hindoo deity, is a celebrated place of pilgrimage for the sectaries of that religion. In performing this pilgrimage, the following ceremonies take place:—On the arrival of the pilgrim at Dwaraca he bathes in a sacred stream named the Goomty, from its windings; for permission to do which he pays the Dwaraca chief four rupees and a quarter; but brahmins pay only three and a half. After this purification a visit is made to the temple, where

offerings are presented, according to the circumstances of the devotee, and a certain number of brahmins are fed.

'The pilgrim next proceeds to Aramra, where he receives the stamp from the hands of a brahmin, which is made with an iron instrument, on which are engraved the shell, the ring, and the lotos flower, which are the insignia of the gods. This instrument is made hot, and impressed on any part of the body, but generally on the arms; and, by not being over-heated, generally leaves an impression on the spot. It is frequently impressed on young infants; and a pilgrim may receive, not only his own stamp, but also stamps on his body for any absent friend. This stamp costs a rupee and a half.

'The pilgrim next embarks for the island of Bate, where, on his arrival, he must pay a tax of five rupees to the chief, present liberal offerings to the god, and dress him in rich clothes and ornaments. The chief of Bate, who is a holy person, receives charge of the present, and retails it again to other pilgrims at a reasonable rate, who present it again to the deity, and it performs a similar revolution. The average number of pilgrims resorting annually to Dwaraca has been estimated to exceed 15,000, and the revenues derived to the temples a lack of rupees.

'Notwithstanding this existing place of pilgrimage, the most authentic Hindoo annals assert, that Dwaraca was swallowed up by the sea a few days after the decease of Krishna. This incarnation of Vishnu spent much of his time at Dwaraca, both before and after his expulsion, by Jarasandha from Mathura, on the banks of the Jumna, in the province of Delhi, which would indicate a greater intercourse between these distant places, than could have been expected at so remote a period. The chalk with which the brahmins mark their foreheads comes from this place, where it is said to have been deposited by Krishna; and from hence, by merchants, is carried all over India.' *(M'Murdo, &c.)*

DWARF, *n. s.* & *v. a.* } Sax. *dwerg*; Dut.
DWARF'ISH, *adj.* } Dan. and Scotch, *di-*
DWARF'ISHNESS, *n. s.* } *verg*, or *dwaerg*; Ger. *zwerg*, *zwerch*, crooked. A small and generally deformed person; often, in ancient times and early poetry, a supernatural being, of no small powers; an elf or fairy. The verb means to lessen; make dwarfish.

The champion stout,
Eftstoones dismounted from his courser brave,
And to the *dwarf* awhile his needless spear he gave.
Spenser.

Behind her farre away a *dwarfe* did lag,
That lasie seemed, in ever being last. *Id. Sonnets.*

Get you gone, you *dwarf!*
You minimus, of hind'ring knot-grass made.
Shakspeare.

This unheard sauciness, and boyish troops,
The king doth smile at; and is well prepared
To whip this *dwarfish* war, these pigmy arms,
From out the circle of his territories. *Id. King John.*

It is reported that a good strong canvas, spread over a tree grafted low, soon after it putteth forth, will *dwarf* it, and make it spread.
Bacon's Natural History.

'Tis no wonder that science hath not outgrown the *dwarfishness* of its pristine stature, and that the intellectual world is such a microcosm.
Glanville's Scepsis.

They, but now who seemed
In bigness to surpass earth's giant sons,
Now less than smallest *dwarfs*, in narrow room
Throng numberless. *Milton's Paradise Lost.*

In a delicate plantation of trees, all well grown, fair, and smooth, one *dwarf* was knotty and crooked, and the rest had it in derision. *L'Estrange.*

We should have lost oaks and cedars, and the other tall and lofty sons of the forest, and have found nothing but *dwarfish* shrubs, and creeping moss, and despicable mushrooms. *Bentley.*

The whole sex is in a manner *dwarfed*, and shrunk into a race of beauties, that seem almost another species. *Addison.*

Saw off the stock in a smooth place; and, for *dwarf* trees, graft them within four fingers of the ground.
Mortimer.

Other dramatists can only gain attention by hyperbolical or aggravated characters, by fabulous and unexampled excellence or depravity, as writers of barbarous romances invigorated the reader by a giant and a *dwarf*. *Johnson.*

From giant oaks, that wave their branches dark,
To the *dwarf* moss that clings upon their bark,
What beaux and beauties crowd the gaudy groves,
And woo and win their vegetable loves. *Darwin.*

This massy portal stood at the wide close
Of a huge hall, and on its either side
Two little *dwarfs*, the least you could suppose,
Were sate, like ugly imps, as if allied
In mockery to the enormous gate, which rose
O'er them in almost pyramidic pride. *Byron.*

DWARFS. The Romans were passionately fond of dwarfs, whom they called nani, or nanæ, insomuch that they often used artificial methods to prevent the growth of boys designed for dwarfs, by enclosing them in boxes, or by the use of tight bandages. Augustus's niece, Julia, was extremely fond of a dwarf called Sonopas, who was only two feet and an hand-breadth high. We have many other accounts of human dwarfs, but most of them deformed in some way or other, besides the smallness of their size. Many relations, also, concerning dwarfs we must consider as fabulous, as well as those concerning giants. 1. Jeffery Hudson, the famous English dwarf, was born at Oakham in Rutlandshire, in 1619; and about the age of seven or eight, being then only eighteen inches high, was retained in the service of the duke of Buckingham who resided at Burleigh on the hill. Soon after the marriage of Charles I., the king and queen being entertained at Burleigh, little Jeffery was served up to table in a cold pye, and presented by the duchess to the queen who kept him as her dwarf. From seven years till thirty he never grew taller; but after thirty he shot up to three feet nine inches, and there fixed. Jeffery became a considerable part of the entertainment of the court. Sir William Davenant wrote a poem called Jeffreidos, on a battle between him and a turkey cock; and in 1638 was published a very small book called The New Year's Gift, presented at court by the lady Parvula to the lord Minimus (commonly called Little Jeffery), her majesty's servant, written by Microphilus, with a little print of Jeffery prefixed. Before this period, Jeffery was sent to France to fetch a midwife for the queen; and, on his

return with this gentlewoman and her majesty's dancing master, he was taken by the Dunkirkers. Jeffery had borne, with little temper, the teazing of the courtiers and domestics, and, at last, being provoked by Mr. Crofts, a young gentleman of family, a challenge ensued: and Mr. Crofts, coming to the rendezvous armed only with a squirt, the little creature was so enraged, that a real duel ensued; and the appointment being on horseback with pistols, to put them more on a level, Jeffery, at the first fire, shot his antagonist dead. This happened in France, whither he had attended his mistress during the troubles. He was again taken prisoner by a Turkish rover, and sold into Barbary. He probably did not remain long in slavery, for, at the beginning of the civil war, he was made a captain in the royal army and in 1644, attended the queen to France, where he remained till the Restoration. At last, upon suspicion of his being privy to the popish plot, he was taken up in 1682, and confined in the Gatehouse of Westminster, where he ended his life in the sixty-third year of his age. 2. In the Memoirs of the Royal Academy of Sciences, a relation is given by count de Tressau, of a dwarf called Bebe, kept by Stanislaus III. king of Poland, who died in 1764, aged twenty-three, when he measured only thirty-three inches. At his birth he measured only between eight and nine inches.

DWELL, *v. n.* & *v. a.* } Saxon, dwelian,
DWEL'LER, *n. s.* } dwolian; Goth. *dwol*
DWEL'LING, } (delay); *duala*, old
DWEL LING-HOUSE, } Teut., is to stay or
DWEL'LING-PLACE, } delay. To remain; continue: hence to be in fixed attention on a person or thing; to continue speaking: as an active verb, to inhabit.

And he gede out and myghte not speke to hem. and thei knewen that he hadde seyn a visioun in the temple, and he bekenide to hem: and he *dwellide* stille doumbe. *Wiclif.*

If thy brother that *dwelleth* by thee be waxen poor, and be sold unto thee, thou shalt not compel him to serve as a bond servant. *Lev.* xxv. 39.

Hazor shall be a *dwelling* for dragons, and a desolation for ever. *Jer.* xlix. 33.

You lovers axe I now this question,
Who hath the worse, Arcite or Palamon?
That on may see his lady day by day,
But in prison moste he *dwellin* alway:
That other wher him lust may ride or go,
But sen his lady shall he never mo.
Chaucer. Cant. Tales.

He in great passion all this while did *dwell*;
More busying his quick eyes her face to view,
Than his dull ears to hear what she did tell.
Spenser.

People do often change their *dwelling-places*, and some must die, whilst other some do grow up into strength. *Id.*

The seed of God, which *dwelleth* in them that are born of God, neither will nor can, nor never will nor can, trespass or sin against God; by reason whereof, they that are born of God have great cause to rejoice, seeing in themselves, through God's goodness, not only a friend, but friendliness itself towards and with God.
MS. Note of Bradford the Martyr, in Coverdale's Bible.

'Tis safer to be that which we destroy,
Than by destruction *dwell* in doubtful joy.
Shakspeare.

The houses being kept up did of necessity enforce a *dweller*; and the proportion of land for occupation being kept up, did of necessity enforce that desire not to be beggar or cottager, but a man of some substance. *Bacon's Henry VII.*

Why are you vexed, lady? Why do you frown?
Here *dwell* no frowns, no anger; from these gates
Sorrow flies far. *Milton.*

All *dwellings* else
Flood overwhelmed, and them with all their pomp
Deep under water roll'd; sea covered sea,
Sea without shore! *Id. Paradise Lost.*

I saw and heard; for we sometimes
Who *dwell* this wild, constrained by want come forth
To town or village nigh. *Id. Paradise Regained.*

Their cries soon waken all the *dwellers* near;
Now murmuring noises rise in every street. *Dryden.*

He preached the joys of heaven, and pains of hell
And warned the sinner with becoming zeal;
But on eternal mercy loved to *dwell*.
Id. Good Parson.

The force of fire ascended first on high,
And took its *dwelling* in the vaulted sky. *Id. Ovid.*

We have *dwelt* pretty long on the considerations of space and duration. *Locke.*

Such was that face, on which I *dwelt* with joy,
Ere Greece assembled stem'd the tide to Troy.
Pope.

A person ought always to be cited at the place of his *dwelling-house*, which he has in respect of his habitation and usual residence, and not at the house which he has in respect of his estate, or the place of his birth. *Ayliffe's Parergon.*

And the soft quiet hamlet where he *dwelt*
Is one of that complexion which seems made
For those who their mortality have felt,
And sought a refuge from their hopes decayed
In the deep umbrage of a green hill's shade. *Byron.*

The Scipios' tomb contains no ashes now;
The very sepulchres lie tenantless
Of their heroic *dwellers*: dost thou flow,
Old Tiber! through a marble wilderness?
Rise, with thy yellow waves, and mantle her distress!
Id.

DWIGHT (Timothy), LL.D., a learned American divine, was born at Northampton, in the state of Massachusetts, 4th May, 1752. His father being an opulent merchant, he was entered, at the age of thirteen, at Yale College, of which he subsequently became the distinguished rector and president. He twice represented his native town in the state legislature, and, in 1795, became minister at Greenfield in Connecticut. He obtained great reputation as a biblical critic and preacher. Besides his theological works, consisting of 5 vols. 8vo., he composed, in early life, two poems, entitled The Conquest of Canaan, and Greenfield Hill; deemed, at that time, the best productions of the American muse. Dr. Dwight died January 11th, 1817, at the age of sixty-five.

DWINA, a large river of European Russia, rising in a lake of the same name, on the borders of the governments of Pskov and Tver. It passes by Veliz, Witepsk, Polotsk, Drissa, and Dunaburg, and falls into the gulf of Riga at Dunamunde, a few miles below Riga. It also communicates with the lake of Ladoga, and with St.

Petersburgh, by a canal which joins it to the river Louat, and is navigable throughout.

Dwina, another large river of Russia, is formed by the union of the Juchona and Jug, near the town of Ustjug, in the government of Vologda. It falls, by two arms, into the White Sea, a little to the north-west of Archangel, and is a broad and deep stream, but its mouths are choked with mud.

DWIN'DLE, *v. n.* } Sax. dwinan; Dut.
Dwin'dled, *adj.* } *dwynen;* Isl. *dwyna.*
To decay; to shrink; wear away; degenerate: as an active verb, to make less; to break down, or into parts; disperse.

Weary sev'nnights nine times nine,
Shall he *dwindle*, peak, and pine.
Shakspeare. Macbeth.

Under Greenvil, there were only five hundred foot and three hundred horse left; the rest were *dwindled* away. *Clarendon.*

Thy *dwindled* legs seem crawling to the grave.
Dryden.

We see, that some small part of the foot being injured by a wrench or a blow, the whole leg or thigh thereby loses its strength and nourishment, and *dwindles* away. *Locke.*

If there have been such a gradual diminution of the generative faculty of the earth, that it hath *dwindled* from nobler animals to puny mice and insects, why was there not the like decay in the production of vegetables? *Bentley.*

Proper names, when familiarized in English, *dwindle* to monosyllables; whereas in other languages they receive a softer turn, by the addition of a new syllable. *Addison.*

Physicians, with their milky cheer,
The love-sick maid and *dwindling* beau repair.
Gay.

Religious societies, though begun with excellent intentions, are said to have *dwindled* into factious clubs. *Swift.*

He found the expected council was *dwindling* into a conventicle, a packed assembly of Italian bishops, not a free convention of fathers. *Atterbury.*

Our drooping days are *dwindled* down to nought,
Their period finished ere 't is well begun. *Thomson.*

Lost in thoughtless ease and empty show,
Behold the warrior *dwindled* to a beau;
Since freedom, piety, refined away,
Of France the mimick, and of Spain the prey.
Johnson. London.

In its preventive police it ought to be sparing of its efforts, and to employ means, rather few, unfrequent, and strong, than many, and frequent, and, of course, as they multiply their puny politic race, and *dwindle*, small and feeble. *Burke.*

Will they thank the noble lord for reminding us how soon these lofty professions *dwindled* into little jobbing pursuits for followers and dependants, as unfit to fill the offices procured for them, as the offices themselves were unfit to be created. *Sheridan.*

DYEING.

DYE, *v. a.* & *n. s.* } Sax. deagan, to color.
Dyer, *n. s.* } Often written die. To
Dye'ing. } tinge; color; stain.

His looke was sterne, and seemed still to threat
Cruell revenge, which he in hart did hyde,
And on his shield Sansloy in blood lines was *dyde.*
Spenser. Faerie Queene.

It will help me nothing
To plead mine innocence; for that *die* is on me,
Which makes my whit'st part black.
Shakspeare. Henry VIII.

We have dainty works of feathers of wonderful lustre, excellent *dies*, and many.
Bacon's New Atlantis.

So much of death her thoughts
Had entertained, as *died* her cheeks with pale.
Milton.

He (an obstinate man) will rather suffer self-murdom than part with the least scruple of his freehold; for it is impossible to *dye* his dark ignorance to a lighter color. *Butler.*

A translator *dyes* an author, like an old stuff into a new colour, but can never give it the lustre of the first tincture; as silks that are twice *dyed* lose their gosses, and never receive a fair color. *Id.*

The fleece, that has been by the *dier* stained,
Never again its native whiteness gained. *Waller.*

All white, a virgin saint she sought the skies;
For marriage, though it sullies not, it *dies.* *Dryden.*

Darkness we see emerges into light,
And shining suns descend to sable night:
Even heaven itself receives another *die*,
When wearied animals in slumbers lie
Of midnight ease; another, when the grey
Of morn preludes the splendour of the day.
Id.

There were some of very low rank and professions who acquired great estates: cobblers, *diers*, and shoemakers gave publick shows to the people.
Arbuthnot on Coins.

It is surprizing to see the images of the mind stamped upon the aspect; to see the cheeks take the *die* of the passions, and appear in all the colours of thought. *Collier of the Aspect.*

Flowers fresh in hue, and many in their class,
Implore the pausing step, and with their *dyes*
Dance in the soft breeze in a fairy mass. *Byron.*

PART I.

THE THEORY OF DYEING.

1. Dyeing is a chemical art which has for its object the extracting of the coloring particles from such substances as afford them, and transferring them to certain stuffs of wool, silk, cotton, or linen. No art has profited so much from the improvements of modern chemistry as the art of dyeing has; and it cannot be, nor ought it to be forgotten, that while we owe much to the discoveries of our own countrymen, and the application of those discoveries to the useful arts, the art of dyeing is highly indebted to the national operations of the French chemists.

2. The origin of this art seems to be of high antiquity; a circumstance which renders it impossible to say to whom or to what it is to be attributed: conjecture, therefore, is all we can pretend to. As most of the materials from which coloring matter is derived are, of themselves, either of dark and disagreeable colors, or else destitute of any particular color, it is probable that, even in the very earliest ages, the love of

ornament, which is natural to mankind, and which is founded on the love of distinction, one of the most active principles of the human mind, would induce them to stain their vestments with various coloring ingredients, especially with vegetable juices But the means of imparting permanent dyes to cloth, and affixing to its fibres such coloring materials, as could not easily be washed out by water, or be obliterated or greatly changed by the action of air, or of certain saline substances, to which they are liable to be exposed, and which are necessary to render them clean when soiled, was an art which required the knowledge of principles not within the reach of untutored men, and only to be obtained by gradual investigation, and by the lapse of a considerable portion of time.

3. According to Pliny, the Egyptians had discovered a mode of dyeing, somewhat resembling that which we use for coloring printed linens: the stuffs, probably after having been impregnated with different mordants, were immersed in vats, where they received various colors. And M. Delaval is of opinion, that they were possessed not only of the art of dyeing, but even of that of printing on cloths.

4. The Phœnicians seem to have a strong claim to the invention of this art, and they held a decided pre-eminence in the practise of it for many ages: their purple and scarlet cloths were sought after by every civilised nation; and the city of Tyre, enriched by its commerce, increased to an amazing extent. But her career was stopped by the vanity and folly of the eastern emperors; under whose dominion this opulent city had unfortunately fallen. Desirous of monopolising the wearing of the beautiful cloths of Tyre, these tyrants issued most severe edicts, prohibiting any one from appearing in the Tyrian blue, purple, or scarlet, except themselves, and their great officers of state. To this injudicious restriction is to be attributed the destruction of the Tyrian dyes. For under the impolitic restraint imposed on the consumption of the Phœnician cloths, the manufacturers and dyers were no longer able to carry on their trade; it grew languid and expired: and, with the trade, the art itself also perished. It is generally supposed from the name, that the Tyrian purple, so much celebrated among the ancients, was discovered at Tyre, and that it contributed not a little to the opulence of that celebrated city. The liquor which was employed in dyeing the purple was extracted from two kinds of shell-fish, one of which, the larger, was called the purple, and the other was a species of whelk. Each of these species was subdivided into different varieties, which were otherwise distinguished, according to the places where they were found, and as they yielded more or less of a beautiful color. It is in a vessel in the throat of the fish that the coloring liquor is found. Each fish only afforded a single drop. When a certain quantity of the liquor had been obtained, it was mixed with a proportion of common salt, macerated together for three days, and five times the quantity of water added. The mixture being kept in a moderate heat, the animal parts which happened to be mixed with it separated, and rose to the surface. At the end of ten days, when these operations were finished, a piece of white wool was immersed, by which means they ascertained whether the liquor had acquired the proper shade. Various processes were followed to prepare the stuff to receive the dye. By some it was immersed in lime-water, and by others it was prepared with a kind of fucus, which acted as a mordant to give it a more fixed color. Alkanet was used by some for the same purpose. The liquor of the whelk did not alone yield a durable color. The liquor from the other shell-fish served to increase its brightnesss; and thus two operations were in use to communicate this color. A first dye was given by the liquor of the purple, and a second by that of the whelk; from which it was called by Pliny purpura dibapha, or purple twice dipped. The small quantity of liquor which could be obtained from each shell-fish, and the tedious process of its preparation and application to the stuffs, raised the price of purple so high, that in the time of Augustus a pound of wool of the Tyrian purple dye, could not be purchased for one thousand denarii, equal to about £36 sterling.

5. Among the Greeks the knowledge of dyeing must have been very imperfect, and little assisted by science; for the art of dyeing linen appears not to have been known in Greece before Alexander's invasion of India, where, according to Pliny, they dyed the sails of his vessels of different colors. The Greeks seem to have borrowed this art from the Indians.

6. India seems to have been the nursery of the arts and sciences, which were afterwards spread and perfected among other nations. Accidents, which had a tendency to improve the art, could not fail to be multiplied rapidly, in a country, —rich in natural productions; requiring little labor for the support of its inhabitants; and the population of which was favored by the bounty of nature, and simplicity of manners, till it was opposed by the tyranny of succeeding conquerors. But religious prejudices, and the unalterable division into castes, soon shackled industry; the arts became stationary; and it would seem, that the knowledge of dyeing cotton in that country (for silk was then unknown, or at least very scarce) was as far advanced in the time of Alexander, as it is at the present period.

7. The beautiful colors, which are observable in some Indian linens, would lead one to suppose that the art of dyeing had there attained a high degree of perfection; but we find by the description which Beaulieu, at the request of Dufay, gave of some operations performed under his own eye, that the Indian processes are so complicated, tedious, and imperfect, that they would be impracticable in any other country, on account of the great difference in the price which is paid for labor.

8. It is unquestionably true, that European industry has far surpassed them in correctness of design, variety of shade, and facility of execution; and, if we are inferior to them with respect to the liveliness of some colors, it is only to be attributed to the superior quality of some of their dyes, or perhaps to the length and multiplicity of their operations and processes. In our own country, however, the art of dyeing made no considerable progress till about the beginning of the

seventeenth century. Before that period our cloths were sent to Holland, to be dressed and dyed. This, however, was probably practised only in the case of particular colors. The dyeing of woollen and silken goods has indeed long since attained a considerable degree of excellence; but the manufactures of cotton, owing to the small attraction of that substance for coloring matters, have been very deficient in this point. Till within these few years, the colors employed in the dyeing of fustians and cotton velvets were few; and, even at this day, many of them are fugitive. But it must be allowed that great improvements have been made within these few years, from the application of chemical principles, and by a diligent investigation of the nature of coloring substances. There is however still much room for the improvement of the art, but this can only be effected by the practical dyer acquiring chemical knowledge, an acquisition now happily placed within the reach of every dyer who is capable of reading and understanding the English language. It will not be necessary for our present purpose to enter into a minute examination of the various theories that have been advanced of the nature of colors; at the same time it may be proper, before we deduce a general theory of dyeing, to make a few observations on the common properties of coloring substances.

9. In explaining the cause of color, and the nature of coloring particles, two great inconveniences have arisen. First, from an attempt to illustrate the action, which the particles of coloring substances have on the rays of light, in consequence of their density and thickness, without having any means of ascertaining this, and without any regard to the attractions which result from their chemical composition; in comparing the coloring particles to mucilages and resins, from some very faint resemblances; and in attempting to explain their coloring properties by conjectures, formed respecting their component parts, while these properties ought rather to be ascertained by direct experiment than explained by an imaginary composition. It was also departing from true theory, to ascribe to laws purely mechanical, the adhesion of the coloring particles to the substances dyed, the action of the mordants, the difference between the true or durable, and the false or fugitive dyes.

10. Hellot, who has written an excellent treatise on dyeing, seems to have erred on this subject; and Macquer, who was amongst the first who entertained just notions respecting chemical attractions, seems to have been led astray by his ideas. It appears, however, that Dufay had before observed, that the coloring particles were naturally disposed to adhere more or less firmly to the filaments which receive them; and had very justly remarked, that without this disposition, stuffs would never assume any color but that of the bath, and would always divide the coloring particles equally with it: whereas the liquor of the bath sometimes becomes as limpid as water, giving off all the coloring particles to the stuff; which, he observes, seems to indicate that the ingredients have less attraction for the water than for the particles of the wool.

11. Bergman seems to have been the first who referred the phenomena of dyeing entirely to chemical principles. Having dyed some wool and some silk in a solution of indigo, in very dilute sulphuric acid, he explains the effects he observed in the operation, by attributing them to the precipitation, occasioned by the blue particles having a greater affinity for the particles of the wool and silk, than for those of the acidulated water. He remarks that this affinity of the wool is so strong, as to deprive the liquor entirely of the coloring particles; but that the weaker affinity of the silk can only diminish the proportion of these particles in the bath, and he shows that on these different affinities depend both the permanence and intensity of the color.

12. This is the true light in which the phenomena of dyeing should be viewed; they are real chemical phenomena, which ought to be analysed in the same way as all those dependent on the actions which bodies exert, in consequence of their peculiar nature. It is evident, that the coloring particles of bodies possess chemical properties, that distinguish them from all other substances; and that they have attractions peculiar to themselves, by means of which they unite with acids, alkalis, metallic oxides, or calces, and some earths, principally alumine or pure clay. They frequently precipitate oxides and alumine, from the acids which held them in solution; at other times they unite with the salts, and form supercompounds which combine with the wool, silk, cotton, or linen. And with these their union is rendered much more close by means of alumine or metallic oxide, than it would be without their intermedium.

13. The difference in the affinity of the coloring particles for wool, silk, and cotton, is sometimes so great, that they will not unite with one of these substances, while they combine very readily with another; thus, cotton receives no color in a bath which dies wool scarlet. Dufay prepared a piece of stuff, the warp of which was wool and the woof cotton, which went through the process of fulling, that he might be certain, that the wool and the cotton received exactly the same preparation; but the wool took the scarlet dye, and the cotton remained white. It is this difference of affinity which renders it necessary to vary the preparation and the process, according to the nature of the substance which is intended to be dyed of a particular color. And these considerations ought to determine the means to be pursued for the improvement of the art of dyeing. It is highly proper to endeavour to ascertain what are the constituent principles of the coloring particles. And in this enquiry, the most essential circumstances are, to determine the affinities of a coloring substance; first, with the substances which may be employed as menstrua; secondly, with those which may, by their combinations, modify the color, increase its brilliancy, and help to strengthen its union with the stuff to be dyed; thirdly, with the different agents which may change the color, and principally with the external agents—air and light.

14. The qualities of the uncombined coloring particles are modified when they unite with a substance; and, if this compound unites with a stuff, it undergoes new modifications. Thus the

properties of the coloring particles of cochineal are modified, by being combined with the oxide of tin, and those of the substances resulting from this combination are again modified by their union with the wool or silk; so that the knowledge we may acquire by the examination of coloring substances in their separate states, can only inform us respecting the preparations that may be made of them; that which we acquire respecting their combinations with substances which serve to fix them, or to increase their beauty, may inform us what processes in dyeing ought to be preferred or tried; but it is only by direct experiment made with the different substances employed in dyeing, that we can confirm our conjectures, and properly establish the process.

15. These facts show, that the changes produced by acids and alkalis on many vegetable colors, such as the chemists employ, in order to discover the nature of different substances, are owing to the combinations, which take place between these coloring particles and the acids and alkalis. The compounds resulting from these may be compared to neutral salts, which possess qualities different from those of their component parts, but in which one of these parts may be in excess, and its qualities consequently predominant. This state of combination is observable between the coloring particles of cochineal and acidulous tartrite of potassa, or cream of tartar: by evaporating slowly a solution of this salt in a decoction of cochineal, crystals are formed, which retain a fine ruby color, much more bright and intense than that of the liquor which formed them.

16. It was the opinion of Berthollet that some of the acids, particularly the nitric, after combining with the coloring particles, changed the color which they at first produced, making it yellow, and finally destroying it; after which they act by means of one of their principles, viz. the oxygen. But this theory, Dr. Ure remarks, is not now tenable, since it is known that dry chlorine does not blanch dry litmus paper. When moisture intervenes, muriatic acid is formed, and oxygen evolved; to the action of which body on the color the bleaching effect is to be ascribed. Water is the source of the discoloration, both in the ancient and modern process of bleaching. Blue colors are not the only ones which become red by the addition of acids, and green by that of alkalis; most red colors, as that of the rose, for instance, are heightened by acids, and made green by alkalis; and some green colors, such as that of the green decoction of burdock, according to the experiments of Mr. Nose, and the green juice of Buckthorn, as is evident from the trials of Mr. Becker, are reddened by acids.

17. This property, which is common to most of the ordinary colors of vegetables, seems to prove that there is a close analogy between their coloring particles; and it is not without foundation, that Linnæus supposed, that the red in vegetables was owing to an acid, and indicated its presence; but there are also many vegetables which contain acid in a disengaged state, without their possessing a red color. It is therefore evident, that the coloring particles have affinities for acids, alkalis, earths, and metallic oxides, which constitute a part of their chemical properties; and in consequence of which, their colors are more or less varied; therefore these particles form, with the stuff on which they are fixed, a compound which retains only some of their original properties; they are also modified by their union with alumine, or pure clay, metallic oxides, and some other substances; as are also those new compounds, when they are further combined with the stuff.

Of Mordants.

18. The term mordant is derived from the French word mordre, which signifies to bite or corrode. In the art of dyeing, it is applied to designate all those substances employed for the purpose of facilitating or modifying the combination of the coloring particles with the stuff dyed. Dr. Bancroft, and Dr. Henry of Manchester, proposed to denominate these substances by the term basis, since the action of many of them does not depend on the acid or corroding principle; but this alteration has not been adopted. Mordants deserve the greatest attention; as by their means colors are varied, brightened, made to strike, and rendered more durable. We shall, therefore, examine the nature of the action of the principal bases or mordants, and endeavour to determine how their attractions serve to unite the coloring particles with the stuff, and how they affect the qualities of the colors.

19. A mordant is not always a simple agent, for new combinations are sometimes formed by the ingredients that compose it; so that the substances employed are not the immediate agents, but the compounds which they have formed. Sometimes the mordant is fixed with the coloring particles, and sometimes the stuff is impregnated with it; on other occasions, both these modes are united; and we may dye successively with liquors containing different substances, the last of which only can act on the particles with which the stuff is impregnated. The art of printing linen affords many processes, in which it is easy to observe the effects of mordants; to elucidate this subject, therefore, we shall mention a few examples.

20. The basis employed for linens intended to receive different shades of red, is prepared by dissolving in eight pounds of hot water, three pounds of alum, and one pound of acetate of lead, or sugar of lead, to which two ounces of potassa, and afterwards two ounces of powdered chalk are added. The alum is decomposed by the acetite of lead, because the oxide or calx of lead combines with the sulphuric or vitriolic acid, and forms an insoluble salt which is precipitated; the base of the alum, alumine, at the same time combines with the acetous acid, or vinegar, and produces an acetite of alumine; and the chalk and potassa answer the purpose of saturating the excess of acid. One of the advantages which result from the formation of the acetite of alumine is, that the alumine is retained in it by a much weaker affinity than in the alum; so that it more easily quits its menstruum, to combine with the stuff and coloring particles. Another

advantage is, that the acid liquor, from which alumine is separated, has much less action on the color when it consists of the acetous, than when it consists of a stronger acid, such as the sulphuric. In short, the acetite of alumine not having the property of crystallising, the mordant, which is thickened with starch or gum, to prepare it for being applied to the block on which the design is engraved, does not curdle, as it would if it contained alum capable of crystallising. By attending to the operation performed upon a piece of linen cloth, we find, that when it has been impregnated by the mordant, in the manner determined by the design, it is put into a bath of madder; the whole of the cloth becomes colored, but the tinge is deeper in those parts which have received the mordant; there the coloring particles have combined with the alumine and the cotton, so that a triple compound has been formed, and the acetous acid separated from its basis remains in the bath.

Thus the coloring particles, combined with the alumine and the stuff, are much more difficultly affected by external agents, than when they are in a separate state, or combined only with the stuff, without any intermediate bond of union; and on this property the operations, to which the cloth is afterwards subjected, are founded. After it has been maddered, it is boiled with bran, and spread upon the grass; and these operations are alternately repeated until the ground becomes white. The coloring particles, which have not united with the alumine, are altered in their composition, dissolved, and separated, while those that have combined with it remain, and are preserved, without alteration; and thus, the design alone remains colored. It seems that this decomposition of the coloring particles, by exposure on the grass and boiling with bran, is accomplished in the same manner as that of the coloring particles of flax, and admits of the same explanation. The only difference consists in substituting bran for alkalis, because they would dissolve a part of the coloring matter, which is fixed by the alumine, and would change its color; instead of which, the bran, having a much weaker action on this substance, affects only the coloring particles, which, by the action of the air, have been disposed more easily to solution. If, however, instead of the mordant, a solution of iron be employed, similar phenomena are exhibited. The coloring particles decompose the solution of iron, and form a triple compound with the stuff; but, instead of red, we obtain from the madder, brown colors of different shades, down even to black; and, by uniting these two mordants, alum and iron, we have mixed colors, inclining to red on the one hand, and to black on the other, such as mordoré, and puce color. Other colors are also procured by substituting dyers-weed for madder; and by means of these two coloring substances, indigo, and the two mordants above mentioned, we obtain most of the different shades that are observable in stuffs which are printed.

21. The different substances which enter into the composition of a mordant remain in combination till a new action is induced by the application of another substance. Thus the affinity of the stuff for one of their constituent parts produces a decomposition and new combinations. But even this effect is sometimes incomplete, or does not at all take place without the action of another affinity, namely, that of the coloring particles. We have an example of this in the mixture of alum and tartar, which is one of the most common mordants in the dyeing of wool.

22. M. Berthollet, having dissolved equal weights of alum and tartar, found that the solubility of the tartar was increased by the mixture. By evaporation and a second crystallisation, the two salts were separated, so that no decomposition had taken place. Half an ounce of alum and one ounce of wool were then boiled together for an hour, and a precipitate was formed, which, being carefully washed, was found to consist of filaments of wool incrusted with earth. To this sulphuric acid was added, and the solution being evaporated to dryness, crystals of alum were produced, with the separation of some particles of carbonaceous matter. The liquid in which the wool had been boiled being evaporated, yielded only a few grains of alum; what remained would not crystallise. This being again dissolved, and precipitated by means of an alkali, the alumina which was thrown down was of a slate color, became black when placed on red-hot coals, and emitted alkaline vapors. From this experiment it appears that the alum was decomposed by the wool, and that part of the alumina had combined with its most detached filaments which were least retained by the force of aggregation; that part of its animal substance had been dissolved and precipitated by the alkali from the triple compound thus formed.

23. M. Berthollet made the same experiment with half an ounce of alum and two drams of tartar; no precipitation took place: he obtained by evaporation a small portion of tartar, and some very irregular crystals of alum; the remainder would not crystallise: this, on being diluted with water, and precipitated by potassa, gave by evaporation a salt which burned like tartar. The wool which had been boiled with the alum felt harsh, but the other retained its softness. The first had acquired from the madder a more dull, though lighter tint, but the color of the latter was more full and bright.

24. From these experiments it appears, in the first place, that the wool had begun a decomposition of the alum; that it had united with a part of the alumine; and that even the part of the alum which retained its alumine had dissolved some of the animal matter. In the second place, that the tartar and alum, which cannot decompose each other solely by their own affinities, become capable of acting on each other when their affinities are assisted by that of the wool. And, in the third place, that the tartar appears principally useful for moderating the too powerful action of the alum upon the wool, whereby it is injured; for tartar is not used in the aluming of silk and thread, which have less action on the alum than wool has. As the decomposition of alum by the tartar and wool takes place in consequence of affinities which nearly balance each other, and the process must therefore go on slowly, it is useful to keep the stuff impregnated with alum and tartar for some days in a moist

place, as is generally recommended. The final effect of aluming, in whatever manner performed, and whatever chemical changes may have taken place in it, consists in the combination of alumine with the stuff: this union has probably been imperfect, and the acids only partially separated, but becomes complete when the cloth has been boiled with madder, as in the case of printed stuffs. But an acid or an alkali may form a supercompound with the stuff, the coloring matter, and the alumine; for there are some colors which are changed by an acid, and restored by alkalis, or by calcarecus earths, which take the acid from them, or vice versa; but this supercomposition does not take place with respect to those colors which are esteemed durable, being unchangeable by alkalis or acids, which are not strong enough to destroy their composition.

25. The attraction of alumine for animal substances is not, however, merely indicated by uncertain appearances, nor supposed for the purpose of being employed in explanations, but is proved by direct experiment. M. Berthollet united them together, by mixing an animal substance with a solution of alum; a double exchange took place, the alkali entered into combination with the acid of the alum, and the alumine, combining with the animal substance, was precipitated. He also proved the affinity of alumine for animal substances by another experiment: having mixed a solution of glue with a solution of alum, he precipitated the alumine by an alkali, and the glue with which it had combined fell down along with it. This compound has the appearance of a semitransparent jelly, and dries with difficulty. Thus, in the preceding experiments, the alkali precipitated the alumine combined with the animal substance, from the uncrystallisable residue of the alum which had been boiled with the wool.

26. The affinity of alumine for most coloring substances, may also be shown by direct experiment. If a solution of a coloring substance be mixed with a solution of alum, a precipitation sometimes takes place; but if to the liquor we add an alkali, which decomposes the alum, and separates the alumine, the coloring particles are then precipitated, combined with the alumine, and the liquor remains clear: this compound has obtained the name of lake. In this experiment, too much alkali must not be added, because alkalis are capable of dissolving lakes in general. No direct experiment has however yet shown, that alumine attracts any vegetable substance except the coloring particles: its affinity for them seems much weaker than that which it has for animal substances; hence the acetite of alumine is a better basis for cotton and linen than alum is, and upon this depend the different means employed to increase the fixity of the coloring particles of madder in the dyeing of these substances.

27. Metallic oxides have so great an affinity for many coloring substances, that they quit the acids in which they were dissolved, and are precipitated in combination with them. On the other hand, all metallic oxides have the property of uniting with animal substances; and these different compounds may be formed by mixing an alkali, saturated with an animal substance, with metallic solutions. It is not surprising, therefore, that metallic oxides should serve as a bond of union between the coloring particles and animal substances; but, besides the attraction of the oxides for the coloring particles, and for animal substances, their solutions in acids possess qualities which render them more or less fit to act as mordants: thus, those oxides which easily part with their acids, such as that of tin, are capable of combining with animal substances, without the aid of coloring particles; it is sufficient to impregnate the wool or silk with a solution of tin, although they be afterwards carefully washed, which is not the case with other metallic solutions. Some metallic substances afford, in combination, only a white and colorless basis; and some by the admixture of their own color, modify that which is proper to the coloring particles; but in many metallic oxides, the color varies according to the proportion of oxygen they contain, and the proportion of this is easily liable to change, Upon these circumstances their properties in dyeing chiefly depend.

28. The affinity of metallic oxides for substances of vegetable origin, seems much weaker than that which they have for animal substances: metallic solutions are, therefore, not well adapted to serve as mordants for colors in cotton or linen, except iron, the oxide of which unites firmly with vegetable substances, as is shown by iron-moulds, which are owing to a real combination of this oxide. Whenever the coloring particles have precipitated a metallic oxide from its menstruum, the supernatant liquor contains the disengaged acid, which is commonly capable of dissolving a portion of the compound of the coloring substance and oxide, so that the liquor remains colored; but sometimes the whole of the coloring particles are precipitated, when the proportions have been accurately adjusted: this precipitation is facilitated, and rendered more complete, by the presence of the stuff, which assists, by the tendency it has to unite with the compound of oxide and coloring particles. Uncombined metallic oxides have also a very evident action on many coloring substances when boiled with them, and modify their color; the oxide of tin in particular increases the brightness and fixity of many.

29. The compounds of oxides and coloring substances are similar to many other chemical compounds, which are insoluble, when the principles of which they are formed are properly proportioned; but which are capable of being supersaturated by an excess of one of the principles, and thence of becoming soluble. Thus a metallic oxide, united with a coloring substance to excess, produces a liquor, the color of which will be modified by the oxides; whereas, when the coloring matter is not in excess, the compound will be insoluble, or nearly so; these effects are very evident in the combination of iron with the astringent principle. Neutral salts such as nitre, and particularly muriate of soda, or common salt, act as mordants, and modify colors; but it is difficult to ascertain the manner in which they act. M. Berthollet found that the muriate of soda was contained, in substance, in the precipitates produced by some species o

coloring particles, and that these precipitates retained a considerable degree of solubility; it would seem that a small part of the salt becomes fixed with the coloring particles and the stuff. Salts with calcareous bases also modify colors; but, as these modifications are nearly similar to those which would be produced by the addition of a small quantity of lime, it is probable that they are decomposed, and that a little of the lime enters into combinaation with the coloring particles and the stuff. By attention to this, we shall easily discern what combinations are formed by the agency of the different reactives, employed in the analysis of coloring substances; but we must not forget, that the mordants and the coloring particles have a mutual action on each other, which may change their properties. It is evident that, by varying the mordants, we may greatly multiply the shades obtained from a coloring substance; even to vary their mode of application may be sufficient: thus we shall obtain different effects by impregnating the stuff with the mordant, or by mixing the mordant with the bath; by applying heat, or using exsiccations, for we operate upon three elective attractions; that of the coloring particles, that of the stuffs, and that of the principle of the mordant; and many circumstances may cause variations in the result of these attractions; circumstances which merit further explanation. Exsiccation, or drying, favors the union of the substances which have an affinity for the stuff, and the decompositions which may result from that union; because the water which held these substances in solution, by its attraction, opposed the action of the stuff; but the exsiccation should be slow, in order that the substances may not be separated before their mutual attractions have produced their effect.

30. Considerable differences must be observed in the manner of employing the mordant, as the force of affinity between the stuff and the coloring matter is greater or less. When this affinity is strong, the mordant and the coloring substance may be mixed together; the compound thus formed, immediately enters into combination with the stuff. But, when the affinity between the stuff and the coloring particles is weak, the compound formed of the latter and the mordant may separate, and a precipitation take place, before it can be attached to the stuff; and hence it is, that the mordant which is to serve as the medium of union between the stuff and the coloring matter, must be combined with the former, before the application of the latter. It is from these differences that different processes must be followed in fixing coloring matters on animal and vegetable productions.

31. In judging of the effects of mordants, and the most advantageous manner of applying them, it is necessary to attend to the combinations which may be formed, either by the action of the ingredients of which they are composed, or by that of the coloring matter and the stuff. It is necessary, also, to take into consideration the circumstances which may tend to bring about these combinations with more or less rapidity, or that may render them more or less perfect. The action which the liquor in which the stuff is immersed may have, either on its color or texture, must also be considered; and to be able accurately to judge of the extent of this action, we must know the proportions of the principles of which the mordant is composed; which of these principles remains in an uncombined state in the liquor, and the proportion or quantity which is separated.

32. The coloring particles have been hitherto considered only as substances capable of forming different combinations, by which their properties are modified; but they may be altered in their composition, either by other external agents, or by the substances with which they unite. The stability of a color consists in its power of resisting the action of vegetable acids, alkalis, soap, and more especially that of the air and light; but this power varies exceedingly, according to the nature of the color and the species of the stuff; for the same durability is not required in the colors of silk as in those of wool. There is not much obscurity in the action of water, acids, alkalis, or soap: it is a solution brought about by these agents: and it appears that a small quantity of acid, or of alkali, sometimes unites with the compound which gives the color; because the color is not destroyed, but only changed, and may be restored by taking away this acid; for instance, by chalk and ammoniac, or volatile alkali. But this is not the case with respect to the action of air and light.

33. Scheele observed, that the oxygenated muriatic acid rendered vegetable colors yellow, and he attributed that effect to the property it had of taking up the phlogiston which entered into their composition. Berthollet has shown, that the properties of the oxygenated muriatic acid were owing to the combination of its oxygen with the substances exposed to its action; that it commonly rendered the coloring particles yellow; but that, by a continuance of its action, it destroyed their color; without determining in what this action consisted. Fourcroy afterwards made several observations on the action of oxygen on the coloring particles, which throw a great deal of light on the nature of the changes they undergo, chiefly when watery solutions of them are left exposed to the air, or have been subjected to a boiling heat. He observed that, in consequence of the action of the air, vegetable decoctions formed pellicles, which lost their solubility, and underwent successive changes of color; he marked the gradations of color thus produced, and concluded, from his observations, that oxygen entered into the composition of the coloring particles; that when it combined with them, their shade was changed; that the more they received, the more fixed did their color become; and that the best method of obtaining permanent unchangeable colors, for painting, was to choose such as had been exposed to the action of the oxygenated muriatic acid.

34. In considering the effects of air on colors, it is necessary to make a distinction between those produced by metallic oxides, and those produced by the coloring particles. Berthollet is of opinion that the modifications of the former are entirely owing to different proportions of oxygen, but from observation he has been led to

form a different opinion respecting the modifications of the latter. He observed, that the oxygenated muriatic acid exhibited different phenomena with the coloring particles; that sometimes it discharged their colors, and rendered them white; that most frequently it changed them to a yellow, fawn, or root-colored, brown, or black, according to the intensity of its action; and that, when their color appeared only discharged or rendered white, heat, or a length of time, was capable of rendering them yellow. He compared the effect produced by the oxygenated muriatic acid, when the particles are rendered yellow, fawn-colored, or brown, with the effect of a slight degree of combustion, and showed that they were the same; that they were owing to the destruction of the hydrogen, which, combining with the oxygen, more easily, and at a lower temperature than charcoal does, leaves it predominant, so that the natural color of charcoal is more or less blended with that which before existed. This effect becomes very evident, when sugar, indigo, or the infusion of the gall-nut, or of sumach, are exposed to the action of oxygenated muriatic gas; the sugar and the indigo assume a deep color, and afford indisputable marks of a slight combustion; the infusion of the gall-nut, and that of sumach, let fall a precipitate, which is not far from being pure charcoal or carbon. These appearances are analogous to those which are observed in the distillation of organised substances; in proportion as the hydrogen is extracted in the form of oil, or of gas, the substance grows yellow and at length there remains only a black coal. If the hydrogen be expelled from an oil, by heat, it grows brown, evidently in the same way.

35. Berthollet also found, by other experiments made on alcohol and ether, that the oxygen united to the marine acid, had the property of combining with the hydrogen, which abounds in these substances, and of thereby forming water. He therefore supposes, that when the oxygenated marine acid renders a color yellow, fawn-colored, or brown, the effect proceeds from the coloring matter having undergone a slight combustion, by which more or less of its hydrogen has been converted into water; and that the charcoal, thus rendered predominant, has communicated its own color. The art of bleaching linen by means of the oxygen of the atmosphere, of the dew, and of the oxygenated marine acid, he also supposes to depend on this change of the coloring matter. The coloring particles of the flax are rendered soluble in the alkaline lixivia, the action of which ought to be alternate with that of the oxygen. These coloring particles may be afterwards precipitated from the alkali, and by evaporation and drying become black, and prove the truth of this theory, both by the color they have acquired, and by the quantity of charcoal which they yield on being analysed. But the alkaline solution of the coloring matter of linen which is of a dark brown color, loses its color almost entirely, by the addition of a certain quantity of oxygenated muriatic acid; and the same effect is observable in many other substances, which have assumed a color originating from a commencement of combustion. A piece of linen, which appears white, may grow yellow in process of time, particularly if exposed to a certain degree of heat, if the oxygenated parts have not been removed by a sufficiently strong lixivium. In the same manner, the green parts of vegetables are rendered white by the oxygenated muriatic acid, but become yellow when boiled.

36. From these facts it appears, that oxygen is capable of whitening, or rendering paler. the coloring matters with which it unites, perhaps by having produced the effects of a slight combustion upon them; or possibly these effects take place only afterwards in a gradual manner, but more rapidly, when the whole is exposed to a certain degree of heat. It is extremely probable, that in all cases a part of the oxygen unites with the coloring matter, without being combined with the hydrogen in particular, and that it is in this way that oxygen acts, in rendering the coloring matter of flax more easily soluble in alkalis. In many other cases oxygen has evidently an influence on the changes which take place in the coloring particles of vegetables; these particles are formed chiefly in the leaves, flowers, and inner bark of trees; by degrees they undergo a slight combustion, either from the action of the atmospheric air which surrounds them, or from that of the air which is carried by a particular set of vessels into the internal parts of vegetables.

37. Berthollet, therefore, supposes we may explain how the air acts upon coloring matters, of an animal, or a vegetable nature; it first combines with them, renders them weaker and paler, and by degrees occasions a slight combustion, by means of which the hydrogen which entered into their composition is destroyed; they change to a yellow, red, or fawn-color; their attraction for the stuff seems to diminish; they separate from it, and are carried off by water: all these effects vary, and take place more or less readily, and more or less completely, according to the nature of the coloring particles; or rather, from the nature of the properties which they possess, in the state of combination into which they have gone. The changes which occur in the colors, produced by the union of the coloring particles with metallic oxides, are effects compounded of the change which takes place in the coloring particles, and of that which is undergone by the metallic oxide.

38. The light of the sun considerably accelerates the extinction of colors. It ought, therefore, if this theory be well founded, to favor the combination of oxygen, and the combustion thereby induced. Sennebier, who has given many interesting observations on the effects of light on different substances, and particularly on their colors, attributes these effects to a direct combination of light with the substances. And the effects of light on the color of wood, have long ago been noticed; it preserves its natural appearance while kept in the dark, but when exposed to the light, it becomes yellow, brown, or of other shades. The same writer also remarked the varieties which occur in this particular in different kinds of wood, and found, that the changes are proportioned to the brightness of the light, and that they take place even under water, but that wetted wood underwent these changes less quickly than that which was dry;

that several folds of riband were required to defend the wood completely, that a single leaf of black paper was sufficient, but that, when paper of any other color was substituted, the change was not prevented; a single covering of white paper was insufficient, but two intercepted the action of the rays of light.

39. He extended his experiments to a great number of vegetable substances, in a manner that may serve to illustrate different phenomena of vegetation. If a well-made solution of the green parts of vegetables in alcohol, which has a fine green color, be exposed to the light of the sun, it very soon acquires an olive hue, and loses its color in a few minutes. If the light be weak, the effect is much more slow; and in perfect darkness, the color remains without alteration, or, if any change does take place, it requires a great length of time. An alkali restores the green color; but if the change of color in the liquor has been completed, the alkali has no effect. No change of color takes place in azotic gas, nor in a bottle which is exactly full. A bottle half full of this green solution was inverted over mercury, by Berthollet, and exposed to the light of the sun; when the color was discharged, the mercury was found to have risen in the bottle, and consequently vital air had been absorbed, the oxygen having united with the coloring matter. The precipitate which M. Sennebier mentions was not evident; the liquor had continued transparent, and retained a slight yellow tinge. On evaporating this liquor, its color was immediately rendered darker, and became brown; the residuum was black, and in a carbonaceous state.

40. Light, therefore, acts by favoring the absorption of oxygen, and the combustion of the coloring matter. At first, the marks of combustion are not evident; the liquor retains only a slight yellow tinge; but, by the assistance of heat, the combustion is completed, the liquor becomes brown, and leaves a black residuum. If the vessel which holds the liquor contains no oxygen gas, the light has no effect on the coloring matter; azotic gas in this situation suffers no diminution. The observation, that ribands, or a single leaf of white paper, do not prevent the action of light, deserves attention, as it shows that light can pass through coverings which appear to be opaque, and exert its energy a considerable depth within. Beccaria and Sennebier have compared the effects of light on ribands of various colors; but the differences they have observed are rather to be attributed to the nature of the coloring matters, than to the colors; for a riband dyed with Brasil-wood will lose its color much sooner than one dyed with cochineal, though the shade should be exactly the same in both.

41. Although light greatly accelerates the combustion of the coloring particles, and seems even necessary for their destruction in some cases, in others it is not required. It was found, by putting some plants into a dark place, in contact with vital air, that that air was absorbed by some of them; and, also, that the rose suffers a change, and becomes of a deeper hue, when it is not in contact with vital air, probably because it contains a little oxygen, the combination of which then becomes more intimate. But many flowers, when in azotic gas, retain their color in perfection. The tincture of turnsole was placed in contact with vital air over mercury, both in the dark, and exposed to the light of the sun; the former continued unchanged for a considerable length of time, and the vital air had suffered no diminution; the other lost much of its color; became red; and the air was, in a great measure, absorbed, and a small quantity of carbonic acid was produced, which undoubtedly had occasioned the alteration of color from blue to red. From this we may form an idea of some of the changes of color, produced by a particular disposition of the component principles of vegetable substances, when, by their combination with oxygen, they undergo the effects of a slight combustion, which may generate an acid, as in the leaves in autumn, which grow red before they become yellow, and in the streaks which are seen in flowers, the vegetation of which is becoming weak.

42. On the whole it is evident, that coloring substances resist the action of the air more or less, according as they are more or less disposed to unite with oxygen, and thereby to suffer more or less quickly a smaller or greater degree of combustion. Light favors this effect, which in many cases is not produced without its assistance; but the coloring matter, in its separate state, is much more prone to this combustion, than when united to a substance, such as alumine which may either defend it by its own power of resisting combustion, or, by attracting it strongly, weaken its action on other substances, which is the chief effect of mordants. This last compound acquires still greater durability, when it is capable of combining intimately with the stuff upon which it is deposited. Thus the coloring matter of cochineal is easily dissolved in water, and its color is quickly changed by the air; but when united to the oxide of tin, it becomes much brighter, and almost insoluble in water, though it is still easily affected by the air, and by oxygenated muriatic acid; it resists the action of these better, however, when it has formed a triple compound with a woollen stuff. But still it is not to be inferred, that all yellow colors are owing to the carbonaceous part of the coloring substance; very different compounds are capable of producing the same colors; thus, indigo is very different from the blue of our flowers, from that of oxide of copper, and from that of Prussian blue. Berthollet does not even suppose, that oxygen may not unite in a small proportion with some coloring substances, without weakening their color, or changing it to yellow. Indigo becomes green by uniting with an alkali, with lime or a metallic oxide; but resumes its color, and quits these substances, when it recovers a small portion of the oxygen which it had lost. The liquor of the whelk, employed to dye purple, is naturally yellowish; but when exposed to the air, and more especially to the sun, it quickly passes through various shades, and at length assumes the exquisite purple color of the ancients; and which, according to the testimony of Eudocia, derived its lustre and perfection from exposure to the sun's rays.

43. It may then be considered as a general

fact, that colors become brighter by their union with a small portion of oxygen. It is on this account found necessary to air stuffs when they come out of the bath, and sometimes even to take them out of it from time to time, expressly for this purpose; but the quantity of oxygen which, thus becoming fixed, contributes to the brightness of the color, is very considerable in some cases and the deterioration of shade soon begins. But the action of the air affects not only the coloring matter and the stuff, but also metallic oxides, when they are employed as intermedia; because the oxides, which have at first been deprived of a part of their oxygen by the coloring particles, may absorb it again. Those then, the color of which varies according to their proportion of oxygen, have thereby an influence in effecting the changes which the stuff undergoes. It is undoubtedly to this cause that the change observable in the blue given to wool, by sulphate of copper, or blue vitriol, and logwood, is to be attributed. This blue soon becomes green by the action of the air: now copper, which has a blue color, when combined with a small proportion of oxygen, assumes a green one by its union with a larger quantity. The change which the coloring particles undergo, may indeed contribute to this effect; but the coloring particles of the logwood, which have themselves a dark color, should rather become brown by combustion, than grow yellow, which would be necessary in order to produce a green with the blue. It has been observed, that coloring particles in a state of combination were less disposed to be changed by the action of the air, than in an uncombined state. This is generally the case, but there are some exceptions; an alkali, for instance, produces a contrary effect. A matrass half filled with an infusion of cochineal, was exposed to the light, over mercury; a similar matrass contained an infusion of cochineal made with a little tartar; and in a third, a small quantity of alkali had been added to the infusion. The second matrass appeared least altered in the same space of time, and in it the absorption had been least considerable. In the third, the color of the liquor became first brown, and was then discharged; and the absorption of air, though inconsiderable, was greater than in the two others. On evaporation it assumed a brown color; and left a residuum of a yellowish brown.

44. Similar experiments having been made on different coloring substances, the alkali was found to darken their color, which grew more and more brown, and promoted the absorption of air. Madder appeared to be the only exception to this rule: its color, which became darker at first, stood better than that of the infusion made without alkali. The general effect of alkalis on the coloring particles is consonant to that which it produces on many other substances, such as sulphur; it favors the absorption of air, because it has a strong affinity for the substance which is the result of that absorption. From this effect of alkalis, a fact which has been observed by Becker may be explained; viz. that a vegetable infusion, rendered green by an alkali, becomes gradually yellow, if left exposed to the air, and that when the yellow is completely formed, acids cannot restore the original color: but that this is not the case, when a vegetable color, reddened by an acid, has been kept in like manner for some time. Those instances in which acids have been employed, which act by giving off their oxygen, must be excepted, for in these there is an extraction of the color.

45. From the above remarks on mordants it must appear very obvious that the practical dyer ought to be exceedingly careful in his selection of substances, giving the preference to those that most readily resist the action of the causes which we have specified.

46. It may not be improper to notice the action of these acids on animal substances, in consequence of its intimate connexion with the subject of mordants. It was observed by M. Brunwiser, that wood, on being exposed to the action of the air, assumed different colors: this led him to endeavour to ascertain whence those colors arose, and to produce them by artificial means. He remarked that on moistening the surface of wood, particularly young wood, with nitric acid, it assumed a yellow color; and that, by applying in the same way the muriatic and sulphuric acids, the wood assumed a violet color. Hence he inferred that, as all colors are produced by a mixture of yellow, blue, and red, all those colors which are seen in the leaves, fruits, and flowers of trees, are owing to the coloring particles which exist in the wood, and are there kept in a state of disguise, by the action of an alkali; that the mineral acids, by taking up this alkali, set the coloring particles at liberty; and that the fixed air, by penetrating the leaves, fruits, and flowers, produces naturally the same effect, by combining with the alkali which kept them disguised.

47. M. de la Folie informs us that having immersed a skein of white silk in nitrous acid of the strength generally used in commerce, the silk in three or four minutes assumed a fine jonquille yellow. He washed it several times in water, that it might not be affected by any adhering acid; the color sustained several trials to which he submitted it, and the silk preserved its lustre unimpaired. When dipped into an alkaline solution, a fine orange color was the result. Dr. Gmelin observes, that he has given a fine brimstone color to silk, by keeping it for a day in cold nitric acid, or some hours only, when the acid was warm. Boiling with soap and water diminished the brightness of this color; and it was changed to a fine lemon color, by being kept for twelve hours in an alkaline solution; but, when the solution was employed hot, a fine gold color was produced. The different solutions of metals in nitric acid communicated a more or less deep yellow to silk, as did also the solution of alumine in the same acid; but those of the calcareous earth and magnesia had no effect whatever.

48. M. Berthollet also found, that the oxygenated muriatic acid has the property of tinging animal substances yellow; but that it does not give them so deep a color as the nitrous acid, and it weakens them much more than that acid when properly diluted; so that the nitrous acid is far preferable for the different purposes of art. It, therefore, appears that the nitrous acid, diluted with a certain quantity of water, gives silk

a yellow color, which is more or less deep, according to the concentration of the acid, its temperature, and the time of immersion; that the silk must be carefully washed as soon as taken out of the acid; that this color possesses considerable brightness; and that it may be made deep without sensibly weakening the silk, which may render the process really useful. The color may also be modified by the use of alkalis. The solutions of calcareous earth and magnesia produce no effect upon silk, because they do not contain an excess of acid; but the solutions of alumine and of all metallic substances, produce a more or less deep yellow, because they all contain more or less excess of acid, which acts upon the silk like uncombined acid.

49. It appears likewise to have been the acid alone that dyed the animal substances yellow, in the experiments of M. Brunwiser, and not the matter extracted from the wood, as he supposed. Nor is the yellow color in these cases owing to iron, as De la Folie supposed; for the purest nitrous acid, which contains no iron, produces it, as well as that in which the presence of that metal may be supposed to exist. Silk, when put into concentrated nitrous acid, quickly assumes a deep yellow color, loses its cohesion, and is dissolved; during this solution, the azote, which enters into the composition of animal substances, is extricated, with a long continued effervescence; if heat be applied, it expels much nitrous gas, and the liquor immediately acquires a deep color and grows brown. At this time, the oxygen of the nitric acid combines with the hydrogen which abounds in animal substances, forming the oil which is obtained from them by distillation, and which renders them so inflammable. When the acid begins to act, and to render the silk yellow, the same effect should also begin to take place. M. Berthollet therefore supposes, that the yellow color arises from a commencement of combustion; but that this combustion being very slight, does not sensibly weaken the silk; if, however, the acid be a little too strong, or the immersion too long continued, or if the whole of it be not carried off by careful washing, the silk immediately becomes weak, and is burnt. It is, therefore, evident why the nitrous acid is preferable in this operation to that which is saturated with nitrous gas; for, in the former, the proportion of oxygen being greater, it is better fitted to produce the effects of combustion, than it becomes in the state of nitrous acid. The same explanation ought to apply to the action of the oxygenated muriatic acid on animal substances; it differs, however, in some essential circumstances, which are not easily explained.

50. Silk has been observed to receive a yellow color when the oxygenated muriatic acid is employed, which is much lighter than when the nitrous acid is made use of; the sulphurous acid discharges it in a great degree, but has no effect on the yellow produced by the diluted nitrous acid. The oxygenated muriatic acid has, however, a much stronger action on the silk; it soon weakens, and even dissolves it; and if it be left for some time in this fluid, the yellow which at first appeared grows lighter, agreeably to what has already been remarked, that oxygen, by accumulation, is capable of disguising the yellow color occasioned by the combustion, which it had originally induced. Berthollet has endeavoured to explain the effects which the sulphurous acid produces on colors, by the facility with which it gives off its oxygen, and has compared them to those of the oxygenated muriatic acid; but, although it be true that oxygen adheres much more weakly to the sulphurous than to the sulphuric acid, he does not believe that that explanation is founded in truth.

51. It appears from the observation of De la Folie, that roses, whitened by the vapor of burning sulphur, become green in an alkaline lixivium, and red in acids; and M. Berthollet has himself observed, that the sulphurous acid reddened the tincture of turnsole, which has a very fading color, but that it acted only like other acids, on infusions of fustic, Brasil-wood and logwood; and further, that silk which has been exposed to the vapor of sulphur, exhaled the smell of sulphurous acid, when moistened with sulphuric acid, although it could not be perceived before that odor existed. He therefore supposes, that the sulphurous acid commonly unites with the coloring particles, and with the silk, without giving off its oxygen to them, and consequently without producing any combustion; that the product of that combination sometimes loses its color entirely, which is probably owing to the semi-elastic state of the oxygen; but sometimes combustion may, and even commonly should take place by degrees, so that the coloring particles, which have been disguised for some time, ought ultimately to leave a yellow color.

Of Astringents.

52. Astringents deserve particular attention, not only from their great use in dyeing, but as possessing a property common to many vegetables. Perhaps, says Berthollet, there is no property in vegetables concerning which such vague ideas have been currently received. A slight relation in taste has frequently been deemed enough to rank them in the class of astringents; and every substance has been commonly regarded as astringent, or acerb, which turned a solution of iron black. This effect has been presumed to arise from one identical principle residing in all the bodies that produce it. Experience has subsequently shown, that two species of astringents ought to be admitted, viz. tannin and gallic acid. The gallic acid is obtained from gall-nuts, in which it is found in great plenty.

53. The gall-nut is an excrescence found on the young branches of the oak, and produced by the puncture of an insect. Different kinds of the gall-nut are met with, some inclining to white, yellow, green, brown, or red; others, ash-colored or blackish. They also differ greatly in magnitude, and are either round or irregular, heavy or light, smooth or covered with protuberances. Those which are small, blackish, knotted, and heavy, are the best; and are known by the name of Aleppo galls. These astringent substances are almost totally soluble in water by long ebullition. Sixteen drachms afforded Neumann fourteen of extract; from the remaining two drachms, only four grains could be extracted

by alcohol. And the same quantity treated first with alcohol, and then with water, afforded twelve drachms and two scruples of spirituous extract, and four scruples of watery extract; the residuum weighed half a scruple more than in the preceding experiment. In the spirituous extract, the taste is more strong and disagreeable than in the watery extract.

54. Many other very interesting observations have been made on astringent substances, by Messrs. Scheele, Monnet, and Berthollet. The latter seems to have proved, that it is not the gallic acid which communicates the astringent properties to the substances that possess it; that the acid itself possesses that property, in a degree inferior to other astringents; and that sumach, treated like the galls, in the manner described by Scheele, affords no gallic acid, though it possesses a high degree of astringency; walnut peels, treated in the same way, do not afford any. The property which the infusion of common galls has, of reddening certain vegetable colors, appears to proceed only from the gallic acid. The infusions of sumach, or of sloe-bark, which very readily produce a black precipitate, that of walnut-tree bark, or of quinquina, did not exhibit this property; and thence it is evident, that the gallic acid does not exist in white galls; for the infusion of these, though it deposit a copious sediment on exposure to the air, is not the gallic acid.

55. If the astringent property were owing to an individual principle distributed in different vegetables, the precipitates obtained by their means, from a solution of iron, would constantly form the same compounds, and exhibit the same appearances and properties; but the precipitate produced by galls is of a blackish blue: that by logwood has a different shade of blue; that by oak is of a fawn color, or blackish brown; that by quinquina, a blackish green. They fall down with different attendant circumstances, and when fixed on stuffs, are discharged by alum and tartar, some much more easily than others; and, probably, by multiplying experiments, many other remarkable differences may be discovered in the properties of these different precipitates. Astringents form with iron different species of compounds, and consequently do not derive their properties from one principle; but there must be a property common to different substances, to enable them to act uniformly on solutions of iron, and to produce precipitates more or less black, and thus appearing of the same nature.

56. The metallic oxides, which unite with the coloring particles, modify their colors; but some metallic oxides, and particularly that of iron, have colors which vary according to the quantity of oxygen they contain. Iron, when united with only a small quantity of oxygen, has a black color. If any substance, by uniting with the oxide of iron, had the property of taking from it a part of the oxygen, which it has when precipitated from its solution in an acid, this would be sufficient to give it a black color; and if the peculiar color of this substance were not predominant, or of itself inclining to black, the compound formed would have a black color; thus nitrous gas, either uncombined or weakly attached to the nitrous acid, renders solutions of iron black, and even precipitates the metal, by depriving it of a portion of its oxygen. By acting in the same manner, ammoniac produces a black precipitate with the solutions of iron; in this case, the hydrogen of the ammoniac forms water, by combining with the oxygen that is disengaged from the oxide of the iron. Galls precipitate gold and silver from their solutions, by reducing them to their metallic state; they, therefore, have the property of separating the oxygen from those metals, to which it adheres but slightly; and, from others, that portion which is retained in the weakest degree. Any infusion of galls, of itself, readily assumes a deep brown color, by exposure to the air; though it absorbs but a small quantity of vital air. The infusion of sumach, and that of woods and barks, also acquire a dark color by exposure to the air; so that when acting upon the oxide of iron, by separating a part of its oxygen, an astringent ought itself to acquire a darker color, by which the black should be assisted.

57. Various substances, which have in other respects different properties, produce black with solutions of iron. Among these, some are real coloring particles, and employed as such in dyeing. Logwood, and even most kinds of coloring particles, form brown or blackish precipitates with iron. Sometimes the astringent effect is not instantaneous; the color of the precipitate is at first light; it grows deeper gradually, being darkened in proportion as the iron loses its oxygen. The infusion of fustic produces, with the solution of iron, a yellow precipitate, that grows brown by degrees, and becomes black after a considerable time. But though the property of precipitating solutions of iron black, does not indicate the presence of the same individual principle in the substances which possess it, there can be no inconvenience in calling it by the name of astringent, provided by that term is meant only a property, which is common to a great number of substances, and which they may have in various proportions.

58. The astringent principle is found to precipitate iron from all acids. The acids of phosphorus and arsenic only have a stronger attraction than it has for iron. The phosphoric acid was known to have the property of separating iron from the sulphuric acid; but all acids, except the acetous, and probably some other vegetable acids which have not been tried, redissolve the precipitate, and make the color disappear, until they are saturated with an alkali. It is not surprising, that the astringent principle can unite with metallic oxides, without having the qualities of an acid; for animal substances, oils, even alkalis, and lime, have this property. It is well known, that it is the precipitate composed of iron and the astringent principle, which, by remaining suspended in the liquor, forms ink.

59. But although chemists considered the astringent principle as always the same, experience shows, that all astringent substances are not equally proper for producing a beautiful and durable black; it is of importance to determine which of them may be employed with the greatest success; it is, however, very difficult to make

comparative experiments on this subject with perfect accuracy, because some substances require much longer boiling than others to extract their astringency; because a difference in their coarseness or fineness, when subjected to ebullition, is sufficient to produce differences in the results; and because the coloring particles have a greater or less disposition to combine with the stuff, according to the proportion of sulphate of iron that has been made use of. Solutions of iron in different acids may produce differences in the results, according to the state of oxygenation of the iron in them, according as the proportion of that metal is greater or less, and according to the degree of strength which the different acids, when disengaged, are capable of exerting on the newly-formed compound.

60. In the dyeing of stuffs also some differences will be found to arise from their greater or less attraction for the coloring particles. Dr. Lewis has proved in his excellent observations on the process of making ink, that no known astringent, not even sumach, can be substituted for gall-nuts. If, says M. Berthollet, too large a proportion of sulphate of iron be added to the galls, the ink becomes speedily brown, and then passes to yellow, because the astringent is destroyed by the action of the oxygen, which the sulphate of the iron affords, or progressively attracts from the atmosphere; for we see that oxygen eventually destroys those coloring substances with which it is combined in too great quantities. When this accident happens from age, Dr. Lewis found that an infusion of galls passed over the faded characters restored them. According to Dr. Ure, the best restorative for faded writing is a solution of ferro-prussiate of potash, faintly acidulated, or sulphuretted hydrogen water. Dr. Lewis ascertained, by repeated experiments, that the best proportion for ink is three parts of gall-nuts to one of sulphate of iron; that cherry-gum, and plum-tree gum, are as good as gum-arabic for giving the necessary consistence, and for keeping suspended the black molecules which tend to fall; and that decoction of logwood employed instead of water for the infusion of the galls improves the beauty of the ink.

61. Mr. Beunie made many experiments to determine the best process for giving cotton a durable black. He first tried what solution of iron gave the finest black to galled cotton; he afterwards combined different solutions, and examined the durability of the blacks which he produced; and made the same experiments on galled cotton, with other metals and semimetals; he employed in like manner a great number of astringents, and tried with them cotton which had received different preparations. He found that out of twenty-one species of astringents, oak saw-dust, the galls of the country, and yellow myrobolans, were the only substances which produced a fine black, but which was still neither so fine nor so durable as that obtained by the common galls. He also found that the oak saw-dust is preferable to the bark, employed by the dyers of thread, and, being cheaper, may be substituted with advantage.

62. Messrs. Lavoisier, Vandermonde, Fourcroy, and Berthollet, made experiments on galls, oak-bark, raspings of heart of oak, the external part of oak, of logwood, and sumach, for the purpose of forming a comparison of their qualities. To ascertain the portion of astringent principle contained in these different substances, they took two ounces of each separately, which they boiled half an hour in three pounds of water; after the first water they added a second, which underwent a similar ebullition; and continued these operations until the substances appeared exhausted: they then mixed together the decoctions that had been successively obtained. A transparent solution of sulphate of iron, in which the proportions of water and sulphate had been exactly determined, was used. They first estimated the quantity of the astringent principle, by the quantity of sulphate which each liquor could decompose, and afterwards by the weight of the black precipitate which was formed. In order to stop precisely at the point of saturation, they proceeded very slowly in the precipitation, and towards the end added the solution of sulphate only drop by drop, and ceased at the moment when the last added quantity no longer augmented the intensity of the black color. When the liquor is too opaque to allow its shade of color to be distinguished, a small quantity of it is largely diluted with water, and, by adding to this a little of the solution of sulphate of iron at the end of a glass tube, it is discovered whether or not the point of saturation has been attained: if we then wish to get the precipitate which is formed, the whole must be diluted with water very copiously.

63. This operation is an easy and accurate mode for manufacturers to determine the proper proportions of astringents, and solutions of iron. To saturate the decoction of two ounces of galls, three drachms and sixty-one grains of iron were required; the precipitate weighed seven drachms and twenty-four grains, when collected and dried. The color of the decoction of oak bark is a deep yellow; a very small portion of sulphate of iron gives it a dirty reddish color, and a larger one changes it to a deep brown. The quantity of sulphate required to saturate the decoction of two ounces of this bark, was eighteen grains. The precipitate, collected and dried, formed coarser and more compact grains, and weighed twenty-two grains; the inner bark of the oak afforded nearly the same result. But the decoction of the raspings of the heart of oak required for its saturation one drachm and twenty-four grains and the precipitate weighed one drachm and twenty-four grains; the decoction of the external wood of the oak produced very little precipitate. The decoction of sumach acquired a reddish violet color, when a small quantity of the sulphate of iron was added. The quantity required for its saturation was two drachms eighteen grains. The precipitate exactly resembled that afforded by the galls. And the decoction of logwood became of a sapphire blue color, by the addition of sulphate of iron: if the point of saturation be exceeded, the blue becomes greenish and dirty. The exact quantity required for saturation was found to be one drachm forty-eight grains, and the weight of the precipitate was two drachms twelve

grains. The different precipitations made by oak take place readily; that by logwood, a little more difficultly, but still more easily than that which is effected by galls.

64. It was next ascertained, by trials made with cloth, that the quantity of astringent substances required to give a black color of intensity, to an equal weight of the same cloth, was proportional to the quantities of astringent principle, which had been already estimated in each kind from the foregoing experiments; but the black obtained by the different parts of the oak does not resist proofs of color, nearly so well as that which is produced by galls. Logwood alone seems not capable of producing so intense a black as galls or oak; nor does the color which it produces stand the test of proofs so well as that produced by galls.

65. We shall now consider the astringent principle in regard to its property of combining with vegetable and animal substances, particularly the latter. Silk acquires by galling, which is an operation that consists in macerating a stuff in a decoction of some astringent substance, a weight which cannot be taken from it, or diminished beyond a certain degree, by repeated washing; after which operation the stuff when put into a solution of iron is dyed black, because the astringent principle, decomposing the sulphate of iron, forms a triple compound with the oxide of iron and the stuff which is dyed. A stuff that is galled is likewise capable of combining with other coloring particles, the colors of which thereby acquire fixity, if they do not naturally possess it; so that the astringent communicates its durability to the triple compound, or perhaps the more complex one which is formed; but by this union the color generally becomes of a deeper shade. The astringent principle, by combining with animal substances, renders them incapable of corruption, and tends to render their texture more compact; and in this the art of tanning consists.

66. It may be proper to take some notice here of the substance denominated tannin, which, while it has some properties in common with the gallic acid, differs from it in others. Seguin was the first who showed that astringents contained a peculiar substance, which, in combining with skin, gave it the properties of tanned leather, and that the tanning effect arose from the combination thus formed. Tannin may be procured by digesting gall-nuts, grape-seeds, oak-bark, or catechu, in a small quantity of cold water. The solution, when evaporated, affords a substance of a brownish-yellow color, highly astringent, and soluble in water and in alcohol. According to Mr. Brand, the purest form of tannin appears to be derived from bruised grape-seeds; but even here, he observes, it is combined with other substances, from which it is, perhaps, scarcely separable. I have never, says he, been able to obtain it of greater purity than by digesting powdered catechu in water at 33° or 34°, filtering and boiling the solution, which, on cooling, becomes slightly turbid, and is to be filtered again, and evaporated to dryness; cold water, applied as before, extracts nearly pure tannin. The most distinctive character of tannin is that of affording an insoluble precipitate when added to a solution of isinglass, or any other animal jelly. On this property the art of tanning depends, for which oak bark is generally employed; but the barks of many other trees are frequently employed for the same purpose. Professor Proust recommends the precipitation of a decoction of galls by powdered carbonate of potassa, for obtaining tannin, washing well the greenish-gray flakes that fall down with cold water, and drying them in a stove. This precipitate becomes brown in the air, brittle and shining like a resin, and yet remains soluble in hot water. In this state the tannin, he says, is very pure. According to Berzelius, tannin consists of hydrogen 4·186 + carbon 51·160 + oxygen 44·654.

67. M. Berthollet considers the abundance of charcoal as the essential characteristic of the astringent principle; the hydrogen, which it contains only in small quantity, is however very much disposed partially to combine with oxygen: Hence, when an infusion of galls is left in contact with vital air, a small quantity of the air only is absorbed, and yet the color of the infusion becomes much deeper; for, in conformity with the theory already laid down, the charcoal readily becomes predominant in consequence of the slight combustion, and the color is rendered deeper, and becomes brown.

68. Substances which contain much charcoal, and can undergo only a slight degree of combustion, ought to possess considerable durability, because charcoal does not combine with oxygen in the ordinary temperature of the air, unless its union be assisted by other attractions, and because slight variations of temperature produce no change in the dimensions of charcoal; but, on the contrary, substances which contain much hydrogen, and in which the particles of the hydrogen are in a state of division, ought to be easily decomposed, by the combination of the hydrogen with azote or oxygen. The disunion of their parts ought to take place from small variations of temperature, because hydrogen is dilatable by heat, which the carbonaceous particles are not. When, therefore, the astringent principle is combined with an animal substance, it communicates to it the properties which it derives from the charcoal; the animal substance becomes less liable to change from slight variations of temperature; instead of growing putrid, it suffers a slight degree of combustion, by the action of the air; for the process of tanning probably could not go on in a perfectly close vessel.

69. On examining the analyses that have been made of indigo, which may be looked upon as the coloring matter least liable to change of any with which we are acquainted, it will be found that this substance leaves, in distillation, a greater proportion of charcoal than even galls themselves. M. Berthollet supposes that it is also to this abundance of charcoal, that the durability of the color of indigo is to be attributed, and that the proportion of this principle is the chief cause of the difference observed in the durability of colors; but the force of adhesion may also have great influence, for a principle

which combines intimately with another substance, ought to form with it a more permanent compound, than one which has only a slight disposition to unite with it; now the astringent principle possesses a very strong disposition to form intimate combinations, especially with animal substances.

70. Upon the same principles may be explained the fixity communicated to coloring particles by alumine, and by those metallic oxides which are not liable to contain different proportions of oxygen, such as the oxide of tin, and some others. The different coloring substances, capable of uniting with metallic oxides, have an action upon them, analogous to that of astringents. The oxides are deprived of more or less of their oxygen, according to the force with which they retain it, the strength of attraction with which the coloring particles tend to combine with them, the proportions in which they meet with each other, and the greater or less disposition of the coloring particles towards combustion.

71. The coloring particles also suffer a change in their constitution from these circumstances: thus the solutions of iron render brown all the colors into which oxide of iron can enter, although it has only a green or yellow color in the state in which it is held in solution by acids, and this effect goes on increasing to a certain degree; but the alteration of the coloring particles may afterwards be carried so far as to spoil their color, and to diminish their tendency to combination; the oxide of iron is then brought back to the yellow color by the oxygen which it attracts, and is capable of retaining. The action of metallic oxides and the coloring particles on each other, explains the changes observed in solutions of the coloring particles, when mixed with metallic solutions. The effect is gradual, as has been shown with respect to fustic. It sometimes happens that the mixture does not even grow turbid immediately, but loses its transparency by degrees; the precipitation begins; the sediment is formed; and its color becomes gradually deeper. In producing these effects, light has sometimes a considerable share.

72. Upon the whole, we may conclude, that metallic colors should be distinguished from those which are peculiar to substances of the vegetable and animal kind: that the colors of metals are modified and changed by oxidation, and by the proportion of oxygen with which they are combined; and that vegetable and animal substances may themselves possess a peculiar color, which varies in the different states through which they pass, or they may owe their colors to colored particles, either combined, or simply mixed with them. These are the particles which are extracted from different substances, and which undergo different preparations, in order to render them proper for the various purposes of dying. And the coloring particles possess chemical properties which distinguish them from all other substances: the affinities which they have for acids, alkalis, earths, metallic oxides oxygen, wool, silk, cotton, and linen, from the principal of these properties. In proportion to the affinity which the coloring particles have for wool, silk, cotton, and linen, they unite more or less readily and intimately with them: and thence arises the first cause of variation in the processes employed, according to the nature of the stuff, and of the coloring substance employed. And by the affinity which the coloring particles have for alumine and metallic oxides, they form compounds with these substances, in which their color is more or less modified, and becomes more fixed, and less affected by external agents than before. This compound being formed of principles which have separately the power of uniting with vegetable substances, and more especially with animal substances, preserves this property, and forms a triple compound with the stuff; and the color, which has been again modified by the formation of this triple union, acquires a greater degree of fixity, and of indestructibility, when exposed to the action of external agents.

73. The coloring particles have often so great an affinity for alumine and metallic oxides, that they separate them from acids which held them in solution, and fall down with them; but the affinity of the stuff is sometimes necessary, in order that this separation may take place. The oxides of metals, which combine with the coloring particles, modify their colors, not only by their own, but also by acting upon their composition by their oxygen. The change which the coloring particles thereby suffer, is similar to that occasioned by the air, which injures every color in a greater or less degree. In the two different principles which constitute the air or the atmosphere, it is only the oxygenous gas that acts upon the coloring particles. It combines with them, weakening their color, and rendering it paler; but presently its action is principally exerted on the hydrogen, which enters into their composition, and it then forms water. This effect, continues M. Berthollet, ought to be considered as a true combustion, whereby the charcoal which enters into the composition of the coloring particles becomes predominant, and the color commonly changes to yellow, fawn color, or brown; or the injured part, by uniting with what remains of the original color, causes other appearances of a different kind. The combustion of the coloring particles is increased by light, and frequently cannot take place without its aid; it is indeed in this way that it contributes to the destruction of colors. Heat promotes it also, but less powerfully than light, provided its intensity be not very great. The effects of the nitric acid, the oxygenated muriatic acid, and even the sulphuric acid, when they make the color of the substances upon which they act pass to a yellow and even to black, are to be attributed to a combustion of a similar nature.

74. The effects of combustion may, however, be concealed, by the oxygen combining with the coloring particles, without the hydrogen being particularly acted upon by it. But colors are more or less fixed, in proportion to the greater or less disposition of the coloring particles to suffer this combustion. There are some substances also capable of acting on the color of stuffs, by a stronger affinity, or by a solvent power; and in this consists the action of acids, alkalis, and soap

A small quantity of these agents, however, may sometimes form supercompounds with the stuff, and its color may be altered in that way. The oxides of metals produce in the coloring particles, with which they unite, a degree of combustion proportioned to the quantity of oxygen which these particles can take from them. Therefore the colors, which the compounds of metallic oxides and coloring particles assume, are the product of the color peculiar to the coloring particles, and of that peculiar to the metallic oxide: but the coloring particles and metallic oxides must be considered in that state to which they have been reduced by the diminution of oxygen in the oxide, and the diminution of hydrogen in the particles that produce the color. It follows from this, that the metallic oxides, to which the oxygen is only slightly attached, are not fit to serve as intermedia for the coloring particles, because they produce in them too great a degree of combustion; instances of this kind are the oxides of silver, gold, and mercury. The oxides which undergo considerable alterations of color, by giving off more or less of their oxygen, are also bad intermedia, particularly for light shades, because they produce changeable colors; examples of this kind are the oxides of copper, of lead, and of bismuth. The oxides which strongly retain their oxygen, and undergo very little change of color by the loss of a proportion of it, are the most suitable for this purpose; such is particularly the oxide of tin, which quits its menstruum easily, which has a strong affinity for the coloring particles, and which affords them a basis that is very white, and proper for giving a brightness to their shades, without altering them by the mixture of another color. The oxide of zinc is possessed of some of these properties in a considerable degree.

75. To account for the colors, which proceed from the union of the coloring particles with the basis which a mordant gives them, we must attend to the proportion in which the coloring particles unite to that basis. Thus the solution of tin, which produces a very copious precipitate with a solution of coloring particles, and which thereby proves that the oxide of tin enters in a large proportion into the precipitate, has a much greater influence on the color of the precipitate, by the whiteness of its basis, than the solution of zinc, or that of alum, which generally produce much less copious precipitates. The precipitates produced by these two last substances retain very nearly the natural tint which the coloring particles afforded. It is therefore necessary to distinguish, in the action of mordants, the combinations that may take place by their means, between the coloring particles, the stuff, and the intermedium; the proportions of the coloring substances and intermedium; the modifications of color, which may arise from the mixture of the color of the coloring particles, and of that of the basis to which they are united; and the changes which the coloring particles may suffer, from the combustion that may be produced by the substance that is employed as an intermedium. It is evident also, that astringents do not differ essentially from coloring particles; but the latter take this name, especially when employed to produce black with oxide of iron, by restoring this metal to the state of a black oxide, and by their assuming a dark color from the action of oxygen.

76. The notion of an astringent supposes, moreover, the property of combining in a certain quantity with animal substances, giving them thus solidity and incorruptibility; because these two properties are most commonly united. These again are derived from their large share of carbon, a circumstance in their composition which gives them increased tendency to solidity, and greater stability.

77. On this ingenious theory of Berthollet, Dr. Bancroft, an able writer on dyeing, has made some remarks that deserve attention. In his opinion M. Berthollet, in ascribing the decays of vegetable and animal coloring matters in general, to effects or changes similar to those of combustion, has gone much farther than is warrantable by facts. It cannot, he thinks, be his intention, that we should apply the term of combustion to alterations which result from a simple addition of oxygen to coloring matters, with a destruction or separation of any of their component parts; though many of the decays and extinctions of these colors evidently arise only from such simple additions of oxygen. The nitric, sulphuric, and other acids, containing oxygen, have the power not only of weakening, but of extinguishing, for a time, the colors of many tingent matters; not by any effect which can properly be denominated a combustion, but rather by a change in their several attractions for particular rays of light; but none of their parts being destroyed, or carried away, the addition of an alkali, or of calcareous carbonate, will generally undo such alteration, and restore the original color, by decomposing and neutralising the acid or oxygen which had caused the alteration.

78. Of this numerous instances might be given, it being the case of almost all vegetable or animal coloring matters. It will be sufficient to mention, that ink dropped into a glass of diluted nitric, vitriolic, or other acid, will lose its color, and that it may be again restored by adding a suitable portion of vegetable or fossil alkali; and that this may be done several times with the same ink, and therefore the change, or loss of color, could not have been the effect of combustion. If, however, this ink had not been fixed by dyeing in the substance either of wool, silk, linen, or cotton, and the substance so dyed had been dipped into a glass of diluted acid, a considerable part of the coloring matter would have been dislodged, and separated from the dyed substance, by its affinity with the oxygen or acid: although no combustion had taken place, the color so separated and lost could not be again restored without a second dyeing. This loss of color would be similar to what frequently happens to colors from exposure to the sun and air, by which they are gradually weakened, many of them without any other change of tint than the simple diminution of their original quantity of coloring matter; and this continuing in the more fugitive colors, particularly that of turmeric, the cloth is soon left as white as before it had been

dyed, without any thing like combustion having ever taken place in it, or in the matter with which it was dyed. It may also be presumed, that colors are not generally impaired by any thing like combustion, from this fact, that there are but few of them which the common muriatic acid does not injure, as much as either the nitric or the sulphuric; and as there can be no combustion without oxygen, and as the common muriatic acid either contains none, or what it does contain is confessedly combined with it by an affinity too powerful to be overcome by any known substance or means, it follows, that the oxygen (if it contain any) cannot be liberated so as to act in the way of combustion upon any other matter; and therefore, when the common muriatic acid changes or destroys the colors, it changes or destroys the affinities upon which they depend, by producing effects different from those of combustion; and as the changes which it produces on colors are in most cases similar to those produced by the nitric, sulphuric, and other acids known to contain oxygen, it is reasonable to conclude, that these also act upon colors, by producing other effects than those of combustion.

79. M. Sennebier exposed a great variety of woods to the action of the sun and air, and found all their colors very soon affected. The white woods generally became brown, and the red and violet changed either to yellow or black. Guaiacum was rendered green; the oak and the cedar were whitened, as were the brown woods generally; effects which certainly do not resemble those of combustion, any more than the bleaching of wax or tallow by exposure to the air. It is therefore evident, argues Dr. Bancroft, that the color of each particular substance depends on its constitution, producing in it a particular attraction for certain rays of light; and a disposition to reflect or transmit certain other rays; and in this respect it may doubtless suffer very considerable changes from the action or combination of oxygen, without any effects similar to those of combustion. And, indeed, the changes of color which arise from the access of atmospheric air, seldom resemble those which the mere predominance of blackness (the supposed natural color of carbon) would produce; though this may have been the case with the coloring matter of brown or unbleached linen, upon which the experiments of M. Berthollet seem principally to have been made. But whether the action of vital air, or its basis, in promoting the decays and colors, ought to be denominated a combustion or not, Dr. Bancroft is confident, that at least some of them are liable to be impaired, not so much by an accession of oxygen, as by the loss of it. The difference of color in arterial and venous blood had been long noticed, and numerous experiments have shown that the fine vermilion color of the former is produced solely by vital air, which it is capable of acquiring through bladders, the coats of blood-vessels, &c. And Mr. Hassenfratz seems to have proved, that, as this fine red color is gained by a dissolution of oxygen in the arterial blood, so it is lost, and the dark color of the venous blood restored, by a separation of the oxygen, in consequence of its forming a new combination with the hydrogen and carbon of the same.

80. Dr. Bancroft is also of opinion, that the blue color of indigo depends upon a certain portion of oxygen, for he has found that a solution of indigo, by losing its oxygen, may become as pellucid, and, excepting a very slight yellowish tinge, as colorless as water, and afterwards speedily return through all the shades of yellow and green to its original deep blue, by exposure to atmospheric or vital air. Similar to this, he remarks, is the fact long since observed by the abbè Nollet, of the tincture of archil employed to color the spirit of wine used in thermometers, and which after some time loses its color, but recovers it again upon being exposed to atmospheric air. This also happens to the infusion of turnsole, and to syrup of violets, which lose their colors when secluded from air, and regain them when placed in contact with it. He has also observed various animal and vegetable colors, produced solely by the contact of atmospheric air; and some others, which, when given by dyeing or callico-printing to wool, silk, cotton, &c., though unable to sustain a single day's exposure to the sun and air without manifest injury, were found to receive none from the action of strong nitric or sulphuric acids, but, on the contrary, were perceived by being wetted with them, and even with oxygenated muriatic and sulphuric acids. But the same colors, if covered with linseed oil, were found to decay more quickly from exposure to the sun and air, than if uncovered. These colors, therefore, he contends, could not owe their decay to the contact or combination of oxygen, because they were not only unhurt, but benefited by its concentrated powers in the nitric, the oxygenated muriatic, and sulphuric acids; and also because they were soonest impaired when defended from the access of oxygen, by being covered with linseed oil. Probably the decays of these colors were occasioned by a loss of at least some part of the oxygen which was necessary to their existence, and which the linseed oil assisted in depriving them of, by the strong affinity it has with oxygen.

81. Dr. Bancroft further observes, that, in forming systems, we are apt to draw general conclusions from only a partial view of facts. This M. Berthollet seems to have done, not only in ascribing the decays of vegetable and animal colors, exclusively to effects similar to those of combustion, but also in representing the oxygenated muriatic acid, as an accurate test for anticipating, in a few minutes, the changes which these colors are liable to suffer by long exposure to the action of sun and air; for, says he, though it is true, that the oxygenated muriatic acid, in weakening or destroying colors, gives up to them more or less of the oxygen which it had received by distillation from manganese; and that, by this new combination of oxygen, those affinities for particular rays of light, upon which their colors depend, are liable to be destroyed; it is nevertheless true, that the changes of color so produced are no certain indication of those, which the combined influence of light and air will occasion upon colors in general; there being several colors which are very speedily destroyed by the latter of these causes, though they resist the strongest action of the oxygenated muriatic acid, without suffering any degree of

injury or hurt. The Dr. adds, that M. Berthollet well knows, since nobody has contributed more to ascertain, how much the properties of oxygen are diversified by each particular basis to which it unites; and that it does not, therefore, seem warrantable to imagine, that its action will not be modified by a basis so powerful as that of the common muriatic acid, or that the united properties of both should represent or resemble those of atmospheric air upon colors, any more than they do in the lungs by respiration; where, instead of supporting life, they would instantly put an end to it.

82. These observations were made in reference to the manner in which M. Berthollet had expressed himself on the subject in his Elemens de l' Art de la Teinture, published in 1791. A new edition of this work was published about the year 1804, in which the author has fully noticed Dr. Bancroft's arguments; refuted some of them; admitted the force of others in part; and, in some respects, has availed himself of the important improvements of Dr. Bancroft.

Of the Differences between Animal and Vegetable Substances.

83. Before we proceed to treat of the practice of dyeing, it will be necessary to consider some of the leading differences that exist between several of the substances to be dyed, and to point out the processes through which they must pass before they will receive the colors required. The following is the substance of M. Berthollet's opinion relative to this subject:—It is now known, that the composition of animal substances is distinguished from that of vegetables, by their abounding in a particular principle called azote, which is found only in small quantities in vegetables, as well as by their containing much more hydrogen, or base of inflammable air, than is found in the other. From these two causes, the differences observed in the distillation of animal and vegetable substances proceed: the former yield a large quantity of ammoniac or volatile alkali; the latter afford very little, and sometimes yield an acid: the former yield a great deal of oil, the predominant principle in which is hydrogen, which is very volatile and disposed to fly off by a small increase of temperature; while the latter sometimes do not yield it in the least sensible quantity.

84. Dr. Ure in a note, p. 151, vol. I. of his translation of Berthollet's treatise, has the following remarks on this theory. Modern researches do not justify this position of M. Berthollet. Sugar and starch, by the analyses of M.M. Gay Lussac and Berzelius, contain about as much hydrogen as fibrin does, and very little less than gelatin and albumen; while, by my analyses, wool and silk contain less hydrogen than cotton and flax. See *Phil. Trans.* for 1822.

I subjoin the results of my analytical experiments on the four principal subjects of dyeing.

	Carbon.	Hydrogen.	Oxygen.	Azote.
Wool	53·70	2·80	31·20	12·30
Silk	50·69	3·94	34·04	11·33
Cotton	42·11	5·06	52·83	
Flax	42·81	5·50	51·70	

The first two, independently of the azote, possess a marked difference of composition, from their excess of carbon and deficiency of oxygen.

85. In consequence of this composition, animal substances, when set on fire, produce a bright flame, which breaks out at the beginning, but is soon stifled by the charcoal which is formed, and which has peculiar properties; their combustion is accompanied with a penetrating odor, owing to the ammoniac and oil which escape unconsumed; they are liable to putrefaction, in which process ammoniac is produced, as well as in their distillation, by a more intimate union of the azote and hydrogen; while vegetable substances, on the contrary, undergo the vinous and acetous fermentation. It is evident, that, as animal substances contain a considerable quantity of principles disposed to assume an elastic form, they have less cohesive force among their particles than vegetables, and a greater disposition to combine with other substances; hence they are more liable to be destroyed by different agents, and are more disposed to combine with coloring particles.

86. The consequence of this action on animal substances is, that they cannot bear lies, and that alkalis should be used with great caution in the processes employed for dyeing them; whereas no danger is to be apprehended from the use of alkalis with substances of the vegetable kind. Nitric and sulphuric acids have also a considerable action on animal substances: the former decomposes them, extricates the azote, separates the fatty matter, and forms carbonic acid or fixed air, and oxalic acid or the acid of sugar with a part of the hydrogen and a part of the charcoal; the latter extricates the inflammable gas, probably azotic gas, and reduces the other principles to the state of carbon. Silk bears some resemblance to vegetable substances, from its being less disposed to combine with coloring particles, and by resisting the action of alkalis and acids more powerfully; which may arise either from the same principles being more intimately combined in it than in wool, or, more probably, from its containing less azote and hydrogen. But, though the action of alkalis and acids upon silk be weaker than upon wool, they should still be employed with great caution, because the brightness of color required in silk appears to depend upon the smoothness of its surface, which should, on that account, be preserved unimpaired, with every possible attention. Cotton withstands the action of acids much better than flax or hemp. Even the nitric acid does not destroy it without great difficulty.

Of Wool.

87. The value of wool, and its fitness for the different kinds of manufacture, depend upon the length and fineness of its filaments. Wool is naturally covered with a kind of grease, which preserves it from moths; so that it is not scoured until it is about to be dyed, or formed into yarn. To scour wool, it is generally put for about a quarter of an hour into a kettle, containing a sufficient quantity of water, mixed with one-fourth of putrid urine, heated to such a degree as the hand can just bear, and it must be stirred from time to time with sticks. It is then taken

out, put to drain, and carried in a large basket to a running water, where it is moved about until the grease is entirely separated, and no longer renders the water turbid; it is afterwards taken out, and left to drain. It sometimes loses in this operation more than a fifth of its weight. This operation should be conducted with much care, since the more correctly it is performed, the better is the wool fitted to receive the dye. In this process the ammonia or volatile alkali which exists in the urine, readily combines with the oil of the wool, and forms a soap, which, being soluble in water, is dissolved and carried off.

88. Wool is dyed in the fleece before it is spun, when it is intended to form cloths of mixed colors; it is dyed after being spun, when intended principally for tapestry: but it is most generally dyed after having been manufactured into cloth. If wool be dyed in the fleece, its filaments, from being separate, absorb a larger quantity of the coloring particles than when it is spun; for the same reason, woollen yarn takes up more than cloth: but cloths themselves vary considerably in this respect, according to their degree of fineness, or the closeness of their texture. Besides, the variety in their dimensions, the different qualities of the ingredients employed in dyeing, and a difference of circumstances in the process, prevent us from relying upon the precise quantities recommended for the processes. This ought in all dyes to be attended to. It is a fact well known to dyers and others, that the coarse wool from the thighs and tails of some sheep receives the coloring particles with great difficulty. The finest cloth is never fully penetrated with the scarlet dye, hence the interior of the cloth appears always of a lighter shade when cut, and sometimes almost white. For the generality of colors, wool requires to be prepared by a bath, in which it is boiled with saline substances, principally with alum and tartar; but there are some dyes for which the wool does not require such a preparation; then it must be well washed in warm water, and wrung out, or left to drain.

89. The surface of the filaments of wool or hair is not quite smooth; for, although no roughness or inequality can be discovered, yet they seem to be formed of fine laminæ placed over each other in a slanting direction, from the root of the filament towards the point, resembling the arrangement of the scales of a fish, which cover each other from the head of the animal to its tail. This peculiarity of structure is proved by a simple experiment. If a hair be held by the root in one hand, and drawn between the fingers of the other hand, from the root towards the point, hardly any friction is perceived, and no noise is heard; but if it be seized by the point, and passed in the same manner between the fingers from the point towards the root, a resistance is felt, and a tremulous motion is perceptible to the touch, while the ear perceives a slight noise. Thus it appears, that the texture is not the same from the root towards the point, as it is from the point towards the root. This is further confirmed by another experiment. If a hair be held between the thumb and fore-finger, and they be rubbed against each other in the longitudinal direction of the hair, it acquires a progressive motion towards the root. This effect depends not on the nature of the skin of the finger, or on its texture, for if the hair be turned and the point placed where the root formerly was, the motion is reversed, that is, it will still be towards the root.

90. On this peculiarity of structure, which was observed by M. Monge, depend the processes of felting and fulling of hair and wool for different purposes. In the process of felting, the flocculi of wool are struck with the string of the bow, by which the filaments are detached, and dispersed in the air. These filaments fall back on each other in all directions, and, when a layer of a certain thickness is formed, they are covered with a cloth, on which the workman presses with his hands in all parts. By this pressure the filaments are brought nearer to each other; the points of contact are multiplied; the progressive motion towards the root is produced by the agitation; the filaments entangle each other; and the laminæ of each taking hold of those of the others, which are in an opposite direction, the whole is retained in a state of close contexture.

91. Connected with this operation is that of fulling. The roughness on the surface of the filaments of wool, and their tendency to acquire a progressive motion towards the root, produce great inconvenience in the operations of spinning and weaving. This inconvenience is obviated by covering the filaments with a coat of oil, which fills up the pores, and renders the asperities less sensible. When these operations are finished, the stuff must be freed from the oil, which would prevent it from taking the color with which it is to be dyed. For this purpose it is taken to the fulling-mill, where it is beaten with large beetles, in a trough of water, through which clay has been diffused. The clay unites with the oil, which, being thus rendered soluble in water, is carried off by fresh portions of water, conveyed to it. In this way the stuff is scoured; but this is not the sole object of the operation. By the alternate pressure of the beetles, an effect similar to that of the hands of the workman, in the operation of felting, is produced. The filaments composing a thread of warp or woof, acquire a progressive motion; are entangled with the filaments of the adjoining threads; those of the latter into the next, and so on, till the whole become felted together. The stuff is now contracted in all its dimensions, and, participating both of the nature of cloth and of felt, may be cut without being subjected to ravel; and, when employed to make a garment, requires no hemming. In a common woollen stocking web, after this operation, the stitches are no longer subject to run, and, the threads of the warp and woof being less distinct from each other, the whole stuff is thickened, and forms a warmer covering.

Of Silk.

92. Silk in its natural state is coated over with a substance which has generally been considered as a kind of gum or varnish. To this

substance the silk is supposed to owe its elasticity and stiffness. Besides this varnish, the silk usually met with in Europe is impregnated with a substance of a yellow color, and, for most of the purposes for which silk is required, it is necessary to free it from both the varnish and the coloring matter. To effect this, the silk is subjected to the operation of scouring; but it is very obvious that when the silk is to be dyed, the scouring need not be carried so far as is required where it is to remain white. Different colors, also, will require different degrees of scouring; and this difference is generally regulated by the quantity of soap employed: 100 pounds of silk boiled in a solution of twenty pounds of soap, for three or four hours, supplying a little water occasionally because of the evaporation, will be sufficiently prepared to receive the common colors. For blue colors the proportion of soap must be greater; and scarlet, cherry color, &c., require a still greater proportion, because for those colors the ground must be whiter.

93. When silk is to be employed white, it must undergo three operations. The first consists in keeping the hanks of silk in a solution of thirty pounds of soap to 100 of silk: this solution ought to be very hot, but not boiling; when any part of the hanks immersed is entirely free from its gum, which is known by the whiteness it acquires, the hanks are to be shaken over, as the dyers term it, so that the part which was not before immersed, may undergo the same process. They are then taken out and wrung, as the process is finished.

94. In the second operation the silk is put into bags of coarse cloth, each bag containing from twenty-five to thirty pounds. A solution of soap is prepared as in the former case, but with a smaller proportion of soap. In this the bags are boiled for an hour and a half; and that they may not receive too much heat by resting on the bottom of the vessel, they must be constantly stirred during the operation.

95. The third operation is to communicate to the silk different shades, that the white may be rendered more pleasing. These shades are known by different names, as China-white, silver-white, azure-white, or thread-white. For this purpose a solution of soap is also prepared, of which the proper degree of strength is ascertained by its manner of frothing by agitation. For the China-white, which is required to have a slight tinge of red, a small quantity of anatto is added, and the silk is shaken over in it till it has acquired the shade required. In other whites, a blue tinge is given by adding a little blue to the solution of soap. The azure-white is produced by means of indigo. To prepare the azure, fine indigo is well washed in moderately warm water, after which boiling water is poured upon it. It is then left to settle, and the liquid part only, which contains the finer and more soluble parts, is employed.

96. Some use no soap in the third operation, but, when the second is completed, they wash the silks, fumigate with sulphur, and azure them with river water, which should be very pure. But all these operations are not sufficient to give silk that degree of brightness which is necessary, when it is to be employed in the manufacture of white stuffs. For this purpose it must undergo the process of sulphuration, in which the silk is exposed to the vapor of sulphur. But before the silk which has been thus treated is fit for receiving colors, and retaining them in their full lustre, the sulphur which adheres to it must be separated by immersion and agitation for some time in warm water, otherwise the colors are tarnished and greatly injured.

97. It has long been an object of considerable importance, to deprive silk of its coloring matter, without destroying the gum, on which its stiffness and elasticity depend. A process for this purpose was discovered by Beaumé, but, as it was not made public, others have been led to it by conjecture and experiment. The following account, given by Berthollet, is all that has transpired concerning this process. A mixture is made with a small quantity of muriatic acid and alcohol. The muriatic acid should be in a state of purity, and entirely free from nitric acid, which would give the silk a yellow color. In the mixture thus prepared, the silk is to be immersed.

98. One of the most difficult parts of the process, especially when large quantities are operated upon, is to produce a uniform whiteness. In dyeing the whitened silk, there is also some difficulty in preventing its curling; hence, it is recommended to keep it constantly stretched during the drying. The muriatic acid seems to be useful in this process, by softening the gum, and assisting the alcohol to dissolve the coloring particles which are combined with it. The alcohol which has been impregnated with the coloring matter may be again separated from it and purified, and may thus serve in future operations, and render the process more economical. This may be effected by distillation with a moderate heat, in glass or stone-ware vessels.

The preparation with alum is a very important preliminary operation in the dyeing of silk. Without this process, few colors would have either beauty or durability. Forty or fifty pounds of alum, dissolved in warm water, are mixed in a vat, with forty or fifty pails of water; and, to prevent the crystallisation of the salt, the solution must be carefully stirred during the mixture. The silk being previously washed and beetled, to separate any remains of soap, is immersed in this alum liquor, and after eight or nine hours is wrung out, and washed in a stream of water: 150 pounds of silk may be prepared in the above quantity of liquor; but when it begins to grow weak, which may be known by the taste, twenty or twenty-five pounds of alum are to be added, and the addition repeated till the liquor acquires an offensive smell. It may then be employed in the preparation of silk intended for darker colors, till its whole strength is dissipated. This preparation of silk with alum must be made in the cold; for when the liquor is employed hot, the lustre is impaired.

Of Cotton.

99. Cotton is the down or wool obtained from the pods of the gossipium, a shrubby plant which

grows in warm climates. Cottons differ principally in the length of their filaments, their fineness, strength, and color. This substance has different shades, from a deep yellow to a white. The most beautiful is not always the whitest; it is necessary to bleach it, by processes similar to those employed in the bleaching of linen. Or, instead of these, oxygenated muriatic acid may be employed; and a more beautiful white thus produced, than by the ordinary way of bleaching. M. Berthollet succeeded in bleaching the yellow cotton of St. Domingo, which very obstinately retains this bad color. But, that cotton may be disposed to receive the dye, it must undergo scouring. Some boil it in pour water, but more frequently alkaline lie is used; the cotton must be boiled in it for two hours, and then wrung out; after which it must be rinsed in a stream of water, till the water comes off clear; it must then be carefully dried. The cotton stuffs, which are to be prepared, must be soaked for some time in water, mixed with at most one-fiftieth of sulphuric acid; after which, they must be carefully washed in a stream of water, and dried. M. Berthollet has observed, that the acid which had been used in this operation, had taken up a quantity of calcareous earth and iron, which would have injured the colors very much. Aluming and galling are generally employed in the dyeing of cotton and linen. In the preparation with alum, about four ounces of it are required to each pound of stuff; it must be dissolved with the precautions above-mentioned. Some add a solution of soda in the proportion of one-sixteenth of the alum; others a small quantity of tartar and arsenic. The thread is well impregnated by working it pound by pound in this solution; it is then put altogether into a vessel, and what remains of the liquor is poured upon it. This is left for twenty-four hours, and then removed to a stream of water, where it remains for about two hours, to extract part of the alum, and is then washed. Cotton, by this operation, gains about one-fortieth of its own weight.

100. In the operation of galling, it is usual to employ different quantities of galls or other astringents, according to their quality, or the effect to be produced. Powdered galls are boiled for about two hours, in a quantity of water proportioned to that of the thread to be galled; the liquor is then allowed to cool to a temperature which the hand can bear, after which it is divided into a number of equal parts, that the thread may be wrought pound by pound; and what remains is poured upon the whole together. It is then left for twenty-four hours, when intended for black, but for other colors twelve or fourteen hours are sufficient. It may then be wrung out, and carefully dried. When stuffs are galled, which have already received a color, the operation is to be performed in the cold, that the color may suffer no injury. M. Berthollet found that cotton which had been alumed, acquired more weight in the galling than that which had not undergone that process; although alum adheres but in a small quantity to cotton, it communicates to it a greater power of combining, both with the astringent principle and with the coloring particles of different substances.

Of Flax.

101. Flax must undergo several preparations before it be fit to receive the dye. Of these, the watering is an operation of much consequence, from its influence on the quality and quantity of the product, and from its deleterious effects on the air. In this operation, a glutinous juice, which holds the green coloring part of the plant in solution, undergoes a greater or less degree of decomposition, according to the mode of conducting the operation. This matter seems to resemble the glutinous part, that is held dissolved in the juice procured from green plants by pressure, which is separated along with the coloring particles by a heat approaching to that of ebullition, which becomes putrid, and which affords ammonia by distillation; but it is probable, that water alone cannot sufficiently separate it from the cortical parts: whence the hemp, which has been watered in too strong a current, is deficient in its softness and pliability, &c. But if the water employed be stagnant and putrid, the hemp acquires a brown color, loses its firmness, and emits highly noxious vapors. This process is therefore performed to the greatest advantage, in watering pits situated on the banks of rivers, where the water may be changed often enough to prevent a putrefaction, that would injure the hemp, and be prejudicial to the workmen; yet not so often as to hinder the degree of putrefaction which is necessary to render the water capable of dissolving the glutinous substance. To prepare flax for the dye, it must also be subjected to the operations of scouring, aluming, and galling, in the same manner as cotton.

PART II.

THE PRACTICE OF DYEING.

102. Before we proceed to give directions for the various processes to be observed in the practice of dyeing, we shall take a brief view of M. Berthollet's observations on dyeing operations in general, which cannot fail to be interesting to the practical dyer.

103. 'It may be regarded,' says he, 'as a general principle, that processes performed in a great manufactory are more advantageous than those which are insulated, since, from the subdivision of labor, each workman, occupied with a single object, acquires celerity and perfection in his employment, by which means the saving of time and labor becomes very considerable.

104. This principle is particularly applicable to the art of dyeing, as the preparation which remains after one operation may often be advantageously employed in another. A bath from which the coloring matter has been nearly extracted in the first operation may be used as a ground for other stuffs, or, with the addition of a fresh portion of ingredients, may form a new bath. The galls which have been applied to the galling of silk may answer a similar purpose for cotton or wool. From this it is evident that the limitations under which the art of dyeing labors

in some countries must tend to obstruct its progress and improvement.

105. A dye-house should be situated as near as possible to a stream of water, and should be spacious and well lighted. It should be floored with lime and plaster; and proper means should be adopted to carry off water or spent baths by forming channels or gutters, so that every operation may be conducted with the greatest attention to cleanliness.

106. The size and position of the boilers are to be regulated by the nature and extent of the operations for which they are designed. Excepting for scarlet and other delicate colors, in which tin is used as a mordant, in which case tin vessels are preferable, the boilers should be of brass or copper. Brass, being less apt than copper to be acted on by means of chemical agents, and to communicate spots to the stuffs, is fitter for the purpose of a dyeing vessel. It is scarcely necessary to say that it is of the greatest consequence that the coppers be well cleaned for every operation; and that vessels of a large size should be furnished at the bottom with a pipe and stop-cock for emptying them; there must also be a contrivance above each copper to support the poles for the purpose of draining the stuffs which are immersed, so that the liquor may fall back into the vessel, and prevent waste.

107. Dyes for silk, where a boiling heat is not necessary, are prepared in troughs or backs, which are long copper or wooden vessels. The colors which are used for silk are extremely delicate. They must therefore be dried quickly, that they may not be long exposed to the action of the air, and that there may be no risk of change. For this purpose, it is necessary to have a drying room heated with a stove. The silk is stretched on a moveable pole, which by the dyers is called a shaker. This is hung up in the heated chamber, and kept in constant motion to promote the evaporation.

108. For pieces of stuffs, a winch or reel must be used; the ends of which are supported by two iron forks which may be put up at pleasure in holes made in the curb on which the edges of the copper rest. The manipulations in dyeing are neither difficult nor complicated. Their object is to impregnate the stuff to be dyed with the coloring particles, which are dissolved in the bath. For this purpose, the action of the air is necessary, not only in fixing the coloring particles, but also in rendering them more vivid; while those which have not been fixed in the stuff are to be carefully removed. In dyeing whole pieces of stuff, or a number of pieces at once, the winch or reel mentioned above must be employed. One end of the stuff is first laid across it, and, by turning it quickly round, the whole passes successively over it. By turning it afterwards the contrary way, that part of the stuff which was first immersed will be the last in the second immersion, and by this means the coloring matter will be communicated as equally as possible.

109. In dyeing wool in the fleece, a kind of broad ladder with very close rounds, called by the dyers of this country a scraw, or scray, is used. This is placed over the copper, and the wool is put upon it for the purpose of draining and exposure to the air, or when the liquor is to be changed.

110. To separate the superabundant coloring particles, or those which have not been fixed in the stuff, after being dyed, it must be wrung out. This operation is performed with a cylindrical piece of wood, one end of which is fixed in the wall, or in a post. This operation is often repeated a number of times successively, for the purpose of drying the stuffs more rapidly, and communicating a brighter lustre. When, after a certain quantity of fresh ingredients is added to a liquor, and it is stirred about, it is said to be raked, because it is mixed with the rake. In dyeing, one color is frequently communicated to stuffs, with the intention of applying another upon it, and thus a compound color is produced. The first of these operations is called giving a ground. When it is found necessary to pass stuffs several times through the same liquor, each particular operation is called a dip. A color is said to be rosed, when a red color, having a yellow tinge, is changed to a shade inclining to a crimson or ruby color; and the conversion of a yellow red to a more complete red, is called heightening the color.

111. In addition to these general remarks, we might give more minute details of the different operations which are employed in dyeing; but, as we cannot presume that they would be of much advantage to the practical dyer, we shall not indulge in useless description. Although the manipulations of dyeing are not very various, and appear extremely simple, they require very particular attention, and an experienced eye, in order to judge of the qualities of the bath, to produce and sustain the degree of heat suited to each operation; to avoid all circumstances that might occasion inequalities of color, to judge accurately whether the shade of what comes out of the bath suits the pattern, and to establish the proper gradations in a series of shades.

112. We shall here make a few observations on the qualities and effects of different kinds of water, which may be considered as one of the most essential agents in the art of dyeing. It is almost unnecessary to remark that water which is muddy, or contains putrid substances, should not be employed; and, indeed, no kind of water which possesses qualities distinguished by the taste, ought to be used. Water which holds in solution earthy salts, has a very considerable action on coloring matters, and it is chiefly by means of these salts. Such, for instance, are the nitrates of lime and magnesia, muriate of lime and magnesia, sulphate of lime, and carbonate of lime and of magnesia.

113. These salts, which have earthy bases, oppose the solution of the coloring particles, and by entering into combination with many of them cause a precipitation, by which means the color is at one time deeper, and at other times duller than would otherwise be the case. Waters impregnated with the carbonates of lime and magnesia, yield a precipitate when they are boiled; for the excess of carbonic acid which held them in solution is driven off by the heat; the earths are thus precipitated, and adhering to the stuffs

to be dyed, render them foul, and prevent the coloring matter from combining with them.

114. It is of much consequence to be able to distinguish the different kinds of water which come under the denomination of hard-water, that they may be avoided in the essential operations of dyeing; but to detect different principles contained in such waters, and to ascertain their quantity with precision, require great skill, and very delicate management of chemical operations, which the experienced chemist only can be supposed to possess.

115. One of these tests is the soap solution, by which it may be discovered whether water contain so large a portion of any of these saline matters as may be injurious to the processes. Salts which have earthy bases have the property of decomposing soap by the action of double affinity. The acid of the salt combines with the alkali of the soap, and remains in solution, while the earth of the salt and the oil of the soap enter into combination, and form an earthy product which is insoluble in water, and produces the curdling appearance which is the consequence of this new combination. Water, then, which is limpid, which has no perceptible taste or smell, and has the property of dissolving soap without decomposition, is sufficiently pure for the processes of dyeing. All waters which possess these qualities will be found equally proper for these purposes.

116. But, as it is not always in the power of the dyer to choose pure water, means of correcting the water which would be injurious, and particularly for the dyeing of delicate colors, have been proposed. Water in which bran has been allowed to become sour, is most commonly employed for this purpose. This is known by the name of sours, or sour water. The method of preparing sour water is this: Twenty four bushels of bran are put into a vessel that will contain about ten hogsheads. A large boiler is filled with water, and when it is just ready to boil, it is poured into the vessel. Soon after the acid fermentation commences, and in about twenty hours the liquor is fit for use. Water which is impregnated with earthy salts, after being treated in this way, forms no precipitate when boiled.

117. Mucilaginous plants are sometimes boiled in the water for the purpose of correcting it, when a froth forms that is to be carefully skimmed off as it rises. The mucilage coagulates, carrying with it the earths which separate on the volatilisation of the carbonic acid, as well as those that are merely mixed with the water and which render it turbid.

The salts, however, which have an earthy base, and which are in general injurious to dyeing, do, in certain cases, serve to modify the colors when the object of the dyer is to obtain deep shades. In this way, for example, a crimson hue is given to the color produced by cochineal.

Of Dyeing Black.

118. We now proceed to give an account of the most useful and advantageous processes for dying different colors, and begin with the method of dying black.

It has been justly observed, by an able writer on this subject, that absolute black being a complete privation of all color, can scarcely be ascribed to any body in nature, since it must then become invisible. The color so named, as communicated by dye-stuffs, is, indeed, rather an intense blue or brown, and is generally produced by the union of these coloring matters with a ferruginous mordant, and hence it may not improperly be termed a compound color. The juice of the cashew nut communicates a black that will not wash out, and which resists boiling with soap or alkalis. The anacardium occidentale and the toxicodendron afford a durable dye, but it is of a brownish hue. The juice of the sloe affords a pale tint of a brownish cast, which becomes deeper after having been repeatedly washed with soap, and afterwards wetted with a solution of alkali. On boiling sloes, their juice becomes red, and the red tinge, which in that state it imparts to linen, is converted by washing with soap into a bluish color of some durability. But these methods of obtaining a black color cannot be employed in dyeing, because these substances are not to be obtained in sufficient quantity, and the black which they afford is not equal to that formed by the common processes. All black colors, therefore, are the effects of combination. To produce them, the black particles formed by the union of the astringent principle with the oxide of iron, held in solution by an acid, are fixed on the stuff that is intended to be dyed.

119. There are very few substances which have the property of producing of themselves a permanent black color. The juice of some plants is found to produce this effect on cotton and linen.

120. When the particles are precipitated from the mixture of an astringent and a solution of iron, they have only a blue color; if they be then left exposed to the air, and moistened with water, their color becomes deeper, but still the blue is distinguishable. The stuff itself then contributes to increase the intensity of the black, whether it be that in this state of combination it undergoes a slight combustion, or that the coloring particles undergo a further degree of combustion, from presenting a larger surface to the air. Without the action of the air, however, a fine black cannot be produced; on which account the operations are performed at different intervals, during which the stuff is taken out of the bath, that it may be exposed to the air. M. Berthollet has ascertained, that black stuffs placed in contact with pure air diminish its volume, and consequently absorb a certain portion of it.

121. *Of Dyeing Woollen Black.*—From the process described by Hellot, woollen cloth, to be dyed black ought to receive the deepest blue tint, or mazarine blue, to be washed in the river as soon as taken out of the vat, and afterwards cleansed by the fulling mill.

For every hundred pounds of stuff, ten pounds of logwood, and ten pounds of galls reduced to powder, are put into a bag, and boiled with a sufficient quantity of water, for twelve hours. A third of this liquor is put into another copper, with two pounds of verdigris. The stuff is im-

mersed in this, and continually stirred for two hours. The liquor should be kept hot, but it ought not to boil. At the end of two hours the stuff is taken out, and a similar portion of the liquor is put into the copper, with eight pounds of sulphate of iron. During the solution of the copperas, the fire is diminished, and the liquor is allowed to cool for half an hour, stirring it well the whole time. The remainder is then to be added, and, after making this addition, the bag containing the astringent matters should be strongly pressed, to separate the whole. A quantity of sumach, from fifteen to twenty pounds, is now to be added, and the liquor is just raised to the boiling temperature; and when it has given one boil, it is to be immediately stopped with a little cold water. A fresh quantity of sulphate of iron, to the amount of two pounds, is then added, and the stuff is kept in it for another hour, after which it is taken out, washed and aired; it is again put into the copper, and constantly stirred for an hour. It is then carried to the river, well washed, and fulled. To soften the black color, and make it more firm, another liquor is prepared with weld. This is made to boil for a moment, and when it is cooled the stuff is passed through it. By this process, which is indeed somewhat complicated, a beautiful black color is produced.

122. But the methods usually followed for dyeing black, are more simple. Cloth, which has been previously dyed blue, is merely boiled in a vat of galls for two hours. It is then kept two hours, but without boiling, in the vat of logwood and sulphate of iron, and afterwards washed and fulled. According to Hellot's process, a liquor is to be prepared of a pound and a half of yellow wood, five pounds of logwood, and ten pounds of sumach, for every fifteen yards of deep blue cloth; and, the cloth having boiled in this for three hours, ten pounds of sulphate of iron are added; the cloth is allowed to remain for two hours longer, when it is taken out and aired, after which it is again returned to the vat for an hour, and then washed and fulled.

When stuffs are to be dyed at less expense, instead of the blue ground, a brown or root-colored ground may be substituted. This brown or fawn color is communicated by means of the root of the walnut-tree, or green walnut-peels. The stuffs are then to be dyed black, according to some of the methods already described.

123. The proportions of the ingredients employed by the English dyers are, for every hundred pounds of cloth previously dyed a deep blue, about five pounds of sulphate of iron, five pounds of galls, and thirty of logwood. The first step in the process is to gall the cloth, after which it is passed through the decoction of logwood, to which the sulphate of iron has been added.

124. As a substitute for galls, the leaves of the arbutus, uva ursi, have been recommended, and employed. The leaves must be carefully dried, so that the green color may be preserved: 100 pounds of wool are boiled with sixteen pounds of sulphate of iron, and eight of tartar, for two hours; the following day the cloth is to be rinsed as after aluming; 150 pounds of the leaves are then to be boiled for two hours in water, and after being taken out, a small quantity of madder is to be added to the liquor, putting in the cloth at the same time, which is to remain about an hour and a half. It is then taken out and rinsed in water. By this process, it is said, that blue cloth receives a tolerably good black, but white cloth becomes only of a deep brown.

125. After the operations for dyeing the cloth have been finished, it is washed in a river, and fulled, till the water runs off colorless. Soap suds are recommended by some in fulling fine cloths, but it is rather difficult to free the cloth entirely from the soap. After the cloth has come from the fulling mill, some propose to give it a dip in a bath of weld, by which it is said to be softened, and the color better fixed; but, according to Lewis, this operation, which in other cases is of advantage, is useless after the cloth has been treated with the soap suds.

126. *Of Dyeing Silk Black.*—In communicating a black color to silk, different operations are necessary, such as boiling, galling, repairing the vat, dyeing, and softening. To give a deeper shade to silk, it is necessary to deprive it of the gummy substance of which we have already spoken. This is done by boiling it four or five hours with one-fifth of its weight of white soap, and afterwards beetling and carefully washing it. The gummy substance, before mentioned, which silk in its natural state contains, does not increase the strength of the silk, which is then called raw; but renders it more liable to wear out, from the stiffness it imparts to it: and though raw silk takes a black color with more facility, than silk which has been scoured or divested of its gum, that black is much less perfect, and resists the re-actives calculated to dissolve the coloring matter, in a much less forcible manner.

127. In the process of galling silk, three-fourths of its weight of galls are to be boiled for three or four hours, but the proportion must depend on their quality. After the boiling, the liquor is allowed to remain at rest for two hours; the silk is then put into the bath, and left there from twelve to thirty-six hours, when it is to be taken out, and washed in the river. But as silk is capable of combining with a great proportion of the astringent principle, or tan, from which it receives a considerable increase of weight, it is allowed to remain for a longer or shorter time, as the silk is required to have more or less additional weight. Hence to communicate to silk, what is called a heavy black, it is allowed to remain longer in the gall-liquor; the process is repeated oftener, and the silk is dipped in the dye a greater number of times

128. While silk is preparing for the process of dyeing, the vat is to be heated, and should be occasionally stirred, that the grounds which fall to the bottom may not acquire too much heat. It should always be kept under the boiling temperature. Gum and solution of iron are added in different proportions, according to the different processes. When the gum is dissolved, and the liquor near the boiling temperature, it is left to settle for about an hour. The silk, which in general is previously divided into three parts,

that each may be successively put into the vat, is now immersed in it. Each part is then to be three times wrung, and, after each wringing, hung up to air. The silk, being thus exposed to the action of the air, acquires a deeper shade. This operation being finished, the bath is again heated, with the addition of gum and sulphate of iron, and this is repeated two or three times, according as the black required is light or heavy. When the process is finished, the silk is rinsed in a vessel with some cold water, by turning or shaking it over.

129. Silk, after it has been taken out of the dye, is extremely harsh, to remove which it is subjected to the operation of softening. A solution of four or five pounds of soap for every 100 pounds of silk, is poured through a cloth into a vessel of water. The solution being completed, the silk is immersed, and allowed to remain in it for about fifteen minutes; it is then to be wrung out and dried.

130. When raw silk is to be dyed, that which has a natural yellow color is preferred. The galling operation must be performed in the cold, if it be desired to preserve the whole of the gum, and the elasticity which it gives to the silk; but if part only of it is wished to be preserved, the galling is to be performed in the warm vat.

131. The dyeing is also performed in the cold. All that is necessary is to add the sulphate of iron to the water in which the stuff is rinsed. By this simple process, the black dye is communicated. It is then washed, beetled once or twice, and dried without wringing, that its elasticity may not be destroyed. Raw silk may be dyed by a more speedy process. After galling, it may be turned or shaken over in the cold bath; and thus by alternately dipping and airing the stuff, the operation may be completed. It is then to be washed and dried as before.

132. The method of dyeing velvet at Genoa, which has been simplified and improved in France, is thus described by Macquer. For every 100 pounds of silk, twenty pounds of Aleppo galls, reduced to powder, are boiled in a sufficient quantity of water for an hour. The bath is allowed to settle till the galls have fallen to the bottom; they are then taken out, and two pounds and a half of sulphuric acid, twelve pounds of iron filings, and twenty pounds of gum, are put into a copper, pierced with holes in all directions. This vessel is suspended by means of two rods passed through its handles, in the boiler, but so as not to touch the bottom. The gum is left for an hour to dissolve, but must be stirred occasionally. If after this time the gum has not all left the pierced copper, it is a proof that the liquor is saturated with it; but if, on the contrary, the whole has disappeared, from two to four pounds more may be added. This cullender should remain constantly suspended in the boiler, except when the dyeing is going on, during which time it must be removed. During these operations the boiler must be kept hot, but not allowed to boil. The galling of the silk is performed with one-third its weight of Aleppo galls. The silk is allowed to remain in the liquor for six hours the first time; then for twelve; and for the rest, *secundum artem*.

133. Dr. Lewis remarks, that though white silk may be dyed a good black, without using either logwood or verdigris, the addition of those two ingredients contributes greatly to improve the color both in silk and in wool. But as the great use of galls in dyeing silk black renders it very expensive, it is of consequence to find some method of diminishing their quantity. M. Anglès proposes the following process:—When the silk has been carefully boiled and washed in the river, it is to be immersed in a strong decoction of green walnut-peels, and left in it till the color of the bath is exhausted. It is then taken out, slightly wrung, dried, and washed in the river. The decoction of walnut-peels is made by boiling a full quarter of an hour, when it is taken from the fire, and suffered to subside before dipping the silk, which has been previously immersed in warm water. A blue ground is next given by means of logwood and verdigris. For every pound of silk, an ounce of verdigris is dissolved in cold water: the silk is left in this solution two hours; it is then dipped in a strong decoction of logwood, wrung out slightly, and dried before it is washed at the river. For light blacks, galling may be altogether omitted; but for a heavy black, half a pound of galls must be employed for every pound of silk intended to be dyed. To prepare the liquor, two pounds of galls and three of sumach are macerated in twenty-five gallons of water over a slow fire, for twelve hours. After straining, three pounds of sulphate of iron, and as much gum arabic are dissolved in it. In this solution the silk is dipped at two different times, leaving it in two hours each time, taking care to air it after the first dipping, and to dry it before giving the second fire, when it is to be again aired and dried: it is then beetled twice at the river; after which a third fire is given it, in the same manner as before, except that it is left in the liquor four or five hours. When drained and dried, it is again beetled twice at the river. The heat during the operation must not exceed 120° of Fahrenheit's thermometer; and before the last two fires, an addition of half a pound of sulphate of iron and as much gum arabic is to be made.

For removing the harshness that silk acquires from the black dye, M. Anglès proposes that a decoction of weld should be preferred to a solution of soap; and observes that if silk be dyed blue with indigo, previous to its being dipped for black, it will take only a mealy black, but that a velvety black will be obtained, if it be prepared with logwood and verdigris; and that green walnut-peels soften the silk.

134. *Of Dyeing Cotton and Linen Black.*—To impart to cotton and linen a deep black dye that will resist the action of soap, is attended with considerable difficulty. Several methods have been proposed as improvements on the old process; the following, practised at Rouen, is thus described by M. d'Apligny. The stuffs are first dyed sky-blue in the usual manner, and are then wrung out and dried. After this they are galled for about twenty-four hours, allowing four ounces

of galls to every pound of stuff; they are then again wrung, and well dried.

The liquor, known among dyers by the name of the black cask, is then poured into a tub, five quarts for every pound of stuff, and in this the stuffs are worked by the hand, in small portions, for about a quarter of an hour, when they are again wrung out and dried. This operation is repeated twice; adding each time a fresh quantity of the black liquor, well scummed. After this it is again aired, wrung out, washed at the river, and dried carefully. For the finishing process, a pound of alder bark for every pound of stuff is boiled for an hour, in a sufficient quantity of water. About half the liquor that was used for the galling, and half as much sumach as alder bark are then added, and the whole boiled together for two hours, and then strained through a sieve. When the liquor is cold, the stuffs are worked through it for some time, occasionally airing them; after which they are suffered to remain immersed in it for twenty-four hours, when they are wrung out and dried.

For softening them, when dry, it is customary to soak and work them in the remains of a weld bath that has been used for other colors, adding to it a little logwood. From this they are taken out and wrung, and instantly put into a tub of warm water, into which has been poured an ounce of olive oil for every pound of stuff. They are then wrung out and dried carefully.

The same author has described another process for imparting to cotton and linen stuffs a fine and durable black. In this process the stuffs are first to be scoured as usual, galled, then alumed, and afterwards dipped in the weld bath. When taken out of this bath, they are to be dyed in a decoction of logwood, to which a quarter of a pound of sulphate of copper has been added for every pound of stuff. After this they must be washed in the river, wrung several times but not too hard; and dyed in a madder bath, in the proportion of half a pound to each pound of stuff. That the black may not be liable to be discharged, the thread must be dipped in a bath of a solution of soap.

135. The following method practised at Manchester is given by Mr. Wilson. A galling is made with galls or sumach; after which the stuff is dyed with the liquor of the bath, consisting of a solution of iron in vegetable acid, frequently composed of alder bark and iron, and then dipped in a decoction of logwood with a little verdigris. This process is repeated till a deep black is obtained; and it is necessary to wash and dry after each of these different operations.

136. Dr. Bancroft, says Berthollet, had announced that the acid of tar was employed at Manchester for black dyes on cotton. Chaptal, in his dyes, used pyrolignous acid; but to Bosc we owe the details of the operation by which he himself obtained a fine black by means of that acid.

137. Fill, says he, a cast-iron boiler with pyrolignous acid; add to it old iron, well oxidised, and boil. The solution of the oxide will take place rapidly. When the iron grows clean, and the solution becomes black as ink, throw the whole into a cask to be employed at need. Prepare your cotton as usual, by giving it a blue ground. Gall; turn the hanks of cotton through a bath of a solution of pyrolignite of iron, diluted with tepid water.

Renew the gallings, and the turnings through the bath of pyrolignite of iron, till you have obtained a deep and brilliant black. Finish by passing your cotton through olive oil. This operation is simple. Throw on some tepid water a little olive oil; pass the cotton through this bath; it absorbs the oil; but it must be worked for a long time in the bath to diffuse the oil equally. This process softens and gives suppleness to the cotton, as well as a great deal of brilliancy. Dry in the shade. The cottons are now of a perfect and very durable black. Every time that the bath of pyrolignite of iron has been employed, it must be thrown away as useless, and the old baths are never to be added to the cask.

Bosc intimates, that the stuffs dyed by means of pyrolignous acid, retain, with much tenacity, the odor of this acid, and that they must be exposed to the air for some time to rid them of it, before folding them up for packing.

The application of oil, which heightens the black, and imparts softness to the stuffs, is given to those which are woven, for example, to cotton velvet, by means of brushes, which are slightly imbued with it at their surface.

Hermstadt recommends a process of Vogler, which consists in making use for a mordant of a solution of nitrate of lead, in turning the stuff through a solution of glue, and in dyeing it in a bath composed of gall-nuts, logwood, and sulphate of iron, for which last the acetate may be substituted.

Of Dyeing Gray.

138. Gray colors are properly the shades of black from the deepest to the lightest. They may be produced in several ways; the two following are the most approved methods.

In the first method a decoction of bruised galls, and a solution of sulphate of iron are used. These ingredients must be prepared separately; and then a part of it added to a quantity of water of a sufficient degree of heat, such as the hand can bear; and in this the cloth or wool is to be dipped.

When it has attained the shade desired, it is taken out, and more of the decoction and solution must be added to the same bath. Into this the cloth is dipped, to give it a deeper shade. In the same manner the operator proceeds to the deepest shades, always adding some of each of the liquors: though, for black-gray and other deep shades, it is best to give the cloth previously a blue ground, more or less deep according to circumstances.

139. The second process for dyeing gray, and which is, by Hellot and others, preferred to the preceding, in consequence of the stuff taking the decoction of galls more firmly, is this. Such a quantity of powdered galls as may be thought requisite is enclosed in a linen bag and boiled in water for two hours. In this decoction the stuffs must be boiled for an hour and then taken out. Some solution of iron is then added to the

liquor, and the stuff passed through it, so as to produce a light shade; more solution of iron is then to be added to produce a deeper shade, and so on till the stuff acquire the requisite color.

If in this operation we go beyond the mark, the color must be darkened as before; but repeating these operations is prejudicial to the stuff, so that we should endeavour to catch the proper shade at once, by taking it occasionally out of the bath. Care must be taken that the bath do not boil, and that it be rather warm than too hot.

In whatever manner grays are dyed, they should be immediately washed in a large body of water, and the darkest may even require soap to cleanse them. It is sometimes required to give grays a tint of another color, as a nut, agate, or reddish cast. In this case, having given a tint more or less blue according to the object intended, the stuffs are dipped in the remains of some cochineal liquor, that has served for dyeing either scarlet or violet, adding galls, logwood, madder, &c.; they are then browned more or less deep with a solution of iron. For the nut gray, yellow wood and logwood are added to the galls, and the stuff is to be dyed from white.

140. *Silk* takes all grays, except black-gray, without previous aluming. The bath is composed of fustic, logwood, archil, and sulphate of iron. These ingredients are varied according to the tint to be given. Thus more archil is employed for grays that are to have a reddish cast, more fustic for those that should incline to a russet or green, and more logwood for those that are to be of a darker gray. For iron-gray logwood and solution of iron are only employed. But black-gray requires aluming; after which the silk is taken to the river, and then dipped in the weld bath. A part of this bath is thrown away, and its place supplied with logwood liquor. When the silk is impregnated with this, a sufficient quantity of solution of iron is added, and, as soon as it has acquired the proper shade, it is to be washed and wrung carefully. If the gray should happen to be too dark, the silk is dipped in a solution of tartar, and afterwards in warm water; and, if by these means the color be weakened too much, the silk is again dipped in a bath of dye that is quite fresh.

141. *Linen* and *Cotton* should have a blue ground imparted to them for black-gray, iron-gray, and slate-gray, but for no other. All the shades require a galling proportionate to the gray to be produced. Gall baths that have before served for other purposes are often employed. When the stuff has been galled, wrung, and dried, it is dipped in a vessel of cold water, to which is added a proper quantity of the bath from the black cask, and of a decoction of logwood. The stuff is worked in separate portions, and afterwards washed and dried properly. Two other processes for dyeing gray are given by M. Pileur d'Apligny, which, according to him, produce a more permanent color. They are these. 1. The yarn is galled, dipped in a very weak bath of the black cask, and then maddered: 2. The yarn is dipped in a very hot solution of tartar, wrung gently and dried. It is then dyed in a decoction of logwood. After this operation it appears black; but, on working it attentively in warm soap suds, the surplus of the dye is discharged, and it remains of a durable slate-gray.

142. A process, says M. Berthollet, the success of which is known to us, consists in taking a very diluted solution of acetate of iron (it is sufficient to add a little of this acetate to a quantity of water), and a decoction of sumach, also very dilute. The cotton is passed in succession from one liquor to the other, till the wished for shade be attained. The finish is given by passing through a water slightly acidulated by sulphuric acid, otherwise the sumach gives a russet hue. By the same process may be obtained with nut-galls less lively grays; and the alder bark affords an agreeable one, which borders on hazel.

A skilful manufacturer of Rouen has communicated to us the following process, which he makes use of successfully for cotton velvets. A galling is given with an equal quantity of gall-nuts and logwood, after which a bath of cold water is administered, and next another bath of water, in which there has been dissolved a weight of sulphate of iron, equal to the one-half of the preceding ingredients. After working the cotton about a quarter of an hour in this bath, it is rinsed in cold water, and brightened.

For this purpose a bath of tepid water is used, to which one-eightieth of decoction of weld, and a little alum, are added. The cotton is left about twenty minutes in this bath, after which it is washed in cold water, and dried.

By modifying the doses of the ingredients, grays, from pearl-gray to the deepest gray, may be thereby obtained.

For grays on printed goods, the same mordant is impressed as for a clear violet, and sumach or gall-nuts are employed according to the shade that is desired.

Of Dyeing Blue.

143. *Of Dyeing Wool Blue.*—There are various processes employed for dyeing wool, silk, &c., of blue color, but the principal coloring matters made use of are indigo and woad. Archil, cochineal, turmeric, and logwood, are occasionally used as auxiliaries. Prussian blue also has, in some cases, been successfully employed in producing some very beautiful but fugitive shades of blue.

The vessels in which blue is dyed are called vats; they were formerly made of wood; in many instances they are still constructed of that material; lead, however, has been found superior, and in modern practice, cast iron is generally used. When the vat is made of wood, the liquor must be raised to the requisite heat in another vessel, and then transferred to it, a process attended with many inconveniences; when made of lead it is surrounded with brick work, of a single brick in thickness, which admits of a fire being placed under it for the purpose of warming the liquor.

144. Some dyers make use of iron vats which are warmed by steam, applied to the exterior of the vat; but the more common method is to use a vessel of cast iron, and to apply a gentle fire under it as occasion may require.

Before the introduction of indigo, blue was dyed with woad, this produced a color which was tolerably permanent, but rather faint; a very rich blue however is now obtained by the union of the two substances. The proportions in which these are used, vary according to the depth of shade required. The following is the process of preparing a vat as given by Quatremere.

145. Into a vat of about seven feet and a half deep, and five and a half in diameter, are thrown two bales of pastel or woad, previously broken, and together about 400 pounds weight; thirty pounds of weld are boiled in a copper for three hours, in a sufficient quantity of water, to fill the vat. To this decoction are added twenty pounds of madder and a basket of bran. The boiling is then continued half an hour longer. This bath is cooled with twenty buckets of water, and after it is settled, and the weld taken out, it is poured into the vat, which must be stirred with a rake all the time that it is running in, and for fifteen minutes longer.

146. The vat is then covered, and allowed to stand for six hours, when it is uncovered, and raked again for half an hour. The same operation must be repeated every three hours. When the appearance of blue streaks is perceived on the surface, eight or nine pounds of quick lime are added; the color then becomes of a deeper blue, and the vat exhales more pungent vapors. Immediately after the lime, or along with it, the indigo, which has been previously ground in a mill, with a small quantity of water, is put into the vat. The quantity is to be regulated by the intensity of the shade required. If, on striking the vat with a rake, a fine blue scum arises, no other preparation is required than to stir it with the rake twice in the space of six hours, to mix the ingredients completely. Great care should be taken not to expose the vat to the air, except during the time of stirring it.

147. Vats of this description are sometimes liable to accidents. A vat is said to be repelled, when, having previously afforded fine shades of blue, it appears black, without any blue streaks; and if on being stirred the black color becomes deeper, the vat at the same time exhales a pungent odor; and the stuff dyed in it comes out of a dirty gray color. These effects are ascribed to an excess of lime.

148. Different means are employed to recover a repelled vat. Some merely reheat it; while others add tartar, bran, urine, or madder. Hellot recommends bran and madder as the best remedy. If the excess of lime be not very great, it is sufficient to leave it at rest five or six hours, putting in a quantity of bran and three or four pounds of madder, which are to be sprinkled on the surface, and then it is to be covered up, and after a certain interval to be tried again. But if the vat has been so far repelled as to afford a blue only when it is cold, it must be left at rest to recover, and sometimes must remain whole days without being stirred with the rake.

149. When it begins to afford a tolerable pattern, the bath must be reheated. In general this revives the fermentation; or it may be excited with bran and madder, and even with a basket or two of fresh pastel.

Hecquet d'Orval and Ribacourt advise to rest satisfied without raking up, if the bath be but slightly thrown back; but if the evil has made more progress, to put into it some pounds of bran enclosed in a bag, and to diffuse through it at the same time three or four pounds of tartar in powder. The bag, after five or six hours, begins to float and is withdrawn, and the rake is used. If the vat be not yet restored, the same operation is repeated.

Quatremere says, that he has re-established a vat which he had thrown back by a surcharge of lime; and that for this effect he contented himself with heating twice, and leaving it then in repose for two days, after which it afforded a well characterised flower or bloom. He left it again in repose for three days; and lastly, heating it for the third time, he found it to be restored.

150. The second accident, to which the pastel vat is subject, is putrefaction. When this accident occurs, the veins and the bloom disappear, its color becomes russet, the paste which is at the bottom rises up, the smell becomes fetid.

Quatremere asserts, that, if a pattern of a dark blue be plunged into a vat thus deteriorated, its color becomes several shades lighter. Putrefaction takes place in a vat, because it has not been sufficiently furnished with lime. Whenever the marks of putrefaction appear, we must hasten to correct it, by adding lime and raking up. This operation must be repeated till the vat be restored; but great care is required to avoid the opposite extreme.

It appears, adds M. Berthollet, that a just distribution of lime is the object which demands most attention in the conduct of a pastel vat. It moderates the fermentation of the pastel, and of the other substances that serve to disoxygenate the indigo; for this effect, pushed too far, destroys the coloring particles. But too strong an action of the lime becomes too great an obstacle. It is therefore proper to wait till the excess of lime disappears, undoubtedly by the successive formation of carbonic acid, or the source of the fermentation must be increased, or a portion of the lime be saturated by a vegetable acid. Another use of the lime is to hold in solution the coloring particles of indigo and of the pastel, which are disoxygenated. Woad is employed as well as pastel, but it appears that the preliminary preparation, to which both are subjected, is not essential. We have seen a skilful dyer of Rouen employ for his vat the plant of woad simply dried; and assert that he derived more advantage from it than from ordinary woad.

151. The vat must be raked about two hours before dyeing, and to prevent the sediment, called paste, from occasioning inequalities in the color, a kind of lattice formed of large cords, termed a cross, is introduced; and when wool is to be dyed in the fleece, a net with small meshes is placed over this.

The wool or cloth being thoroughly wetted with clear water, a little warm is pressed out, and dipped into the vat, where it is moved about a longer or shorter time, according as the color is required to be more or less deep, taking it out occasionally to air. The action of the air is ne-

cessary to change the green color given by the bath to a blue. In a rich bath it is difficult to give a uniform color to light blues: the best method of obtaining such shades, therefore, is to use vats nearly exhausted, and of a low temperature. Wool and cloth dyed blue, should be washed with great care, to carry off the particles not fixed in the wool, and those which are of a somewhat deep blue, ought even to be carefully cleansed, by fulling with soap, which does not alter the color. Those designed to be dyed black, ought to be treated in the same manner; but it is not so necessary for those which are to be green, to be thus prepared.

152. The indigo vat is that which contains neither pastel nor woad. The vessel used for this preparation is a copper, which, being of a conical figure, leaves between it and the brick-work that surrounds it, and on which its brim rests, an empty space sufficient to admit of the action of the fire. Into this copper are poured about forty pails of water, in which have been boiled six pounds of salt of tartar, twelve ounces of madder, and six pounds of bran. This liquor is to be put into the vat, grounds and all: six pounds of indigo ground in water are then to be put in, and after raking it carefully the vat is to be covered. A slow fire is to be kept up round it. Twelve hours after it is filled, it is to be raked a second time; and so on every twelve hours, till it become blue, which it will be in forty-eight hours. If the bath be well managed, it will be of a fine green, covered with copper colored scales, and have a blue scum or flower at the top. It may be observed, that the theory of this vat is the same as that of the foregoing, except that the indigo is here dissolved by alkali instead of lime. When this vat, which is much more easily managed than that of pastel, is in a proper state, it may be used for dyeing in the same manner as that described above.

153. M. Hellot describes two vats in which the indigo is dissolved by urine. Madder is added to it, and in the one vinegar, in the other alum and tartar, of each a weight equal to that of the indigo. The quantity of urine ought to be considerable. The solution of indigo, deprived of its oxygen by the urine and madder in fermentation, is due to the ammonia formed in the urine, either by the action of heat or fermentation. Hellot remarks, that an effervescence takes place on pouring in the solution of alum and tartar, which probably tends to stop the putrefaction. These vats are by no means comparable with those of pastel, or indigo; much less work being despatched by them; so that they are adapted only for small dye-houses.

154. *Of Dyeing Silk Blue.*—Silk is dyed blue with indigo alone, without any proportion of woad. The proportion of indigo mentioned in the preparation of the indigo vat, and sometimes a larger, is employed, with six pounds of bran, and about twelve ounces of madder. According to Macquer, half a pound of madder for each pound of potassa, renders the vat greener, and produces a more fixed color in the silk. When the vat is come to, it should be refreshed with two pounds of potassa, and three or four ounces of madder; and, after being raked, in the course of four hours it is fit for dyeing. The temperature should be so moderated that the hand may be held in it.

155. The silk, after being boiled with soap, in the proportion of thirty pounds of soap to 100 of silk, and well cleaned by repeated beetlings in a stream of water, must be dyed in small portions. When it has been turned once, or oftener, in the bath, it is wrung out and exposed to the air, that the green color may change to a blue. When the change is complete, it is thrown into clear water, and afterwards wrung out. Silk dyed blue should be speedily dried. In damp weather, and in winter, it is necessary to conduct the drying in a chamber heated by a stove. The silk should be hung on a frame kept constantly in motion. To dye light shades, some employ vats that are nearly exhausted: but it ought to be observed, that the color thus obtained is less beautiful and less permanent than when fresh vats, containing a smaller quantity of indigo, are employed.

156. Some addition is required to be made to the indigo, to give silk a deep blue. A previous preparation is necessary, by giving it another color or ground. For the Turkey blue, which is the deepest, a strong bath of archil is first prepared. Cochineal is also sometimes used, instead of archil, for the ground, to render the color more permanent. A blue is given to silk by means of verdigris and logwood, but possesses little durability. It might be rendered more permanent, by giving it a lighter shade in this bath, then dipping it in a bath of archil, and, lastly, in the indigo vat.

157. When raw silk is to be dyed blue, such as is naturally white should be selected. Being previously soaked in water, it is put into the bath in separate hanks, as already directed for scoured silks; and, as raw silk combines more readily with the coloring matter, the scoured silk, when it can be conveniently done, should be first put into the bath. If archil, or any of the other ingredients, are required to give more intensity to the color, the mode of application is the same as that directed for scoured silk.

There are various other methods of conducting this part of dyeing, described by M. d'Apligny, Quatremere, Bergman, Scheffer, &c., which we omit as not being of material importance to the practical dyer.

158. *Of Dyeing Cotton and Linen Blue.*—In communicating the blue color to these substances, the principal ingredient employed is indigo; but Prussian blue has been found to answer extremely well. According to Le Pileur d'Apligny, says M. Berthollet, the vat for dyeing cotton and linen is capable of holding about 120 gallons. The quantity of indigo employed is usually from six to eight pounds, finely ground, and boiled in a lee drawn off from double its weight of potassa, with a quantity of lime equal in weight to the indigo. During the boiling, which is to be continued till the indigo is thoroughly penetrated with the lee, the solution must be constantly stirred, to prevent the indigo from being injured by adhering to the bottom of the vessel.

159. During this process, another quantity of quick-lime, equal to the indigo, is to be slaked. Twenty quarts of warm water are added, in which

is to be dissolved a quantity of sulphate of iron, equal to twice the weight of the lime. The solution being completed, it is poured into the vat, which is previously half filled with water. To this the solution of indigo is added, with that part of the lie which was not employed in the boiling. The vat must now be filled up nearly to the top. It must be raked twice or thrice every day till it is completely prepared, which is generally the case in forty-eight hours, and sometimes sooner, as it depends on the temperature of the atmosphere. A small proportion of bran, madder, and woad, is recommended by some to be added to this vat.

160. The process which is followed at Rouen, and described by Quatremere, is more simple. The vats, which are constructed of a kind of flint, are coated within and without with fine cement, and are arranged in one or more parallel lines. Each vat contains four hogsheads of water. The indigo, to the amount of eighteen or twenty pounds, being macerated for a week in a caustic lie, strong enough to bear an egg, is ground in a mill; three hogsheads and a half of water are put into the vat, and afterwards twenty pounds of lime. The lime being thoroughly slaked, the vat is raked, and thirty-six pounds of copperas are added; and, when the solution is complete, the ground indigo is poured in through a sieve. It is raked seven or eight times the same day, and, after being left at rest for thirty-six hours, it is in a state fit for dyeing.

161. In extensive manufactories, it is necessary to have vats set at different times. In conducting the process of dyeing, the stuffs are first dipped in the most exhausted vat, and then regularly proceeding from the weakest to the strongest, if they have not previously attained the desired shade. The stuffs should remain in the bath only about five or six minutes, for in that time they combine with all the coloring matter they can take up. After they have been dipped in a vat, it should not be used again till it has been raked, and stood at least twenty-four hours, unless it has been lately set, when a shorter period is sufficient.

162. After the stuffs have been dipped three or four times in a vat, it becomes black, and no blue or copper-colored streaks are seen on the surface after raking it. It must then be renewed, by adding four pounds of copperas with two of quicklime, after which it must be raked twice. In this way a vat may be renewed three or four times; but the additional quantity of ingredients must be diminished as the strength of the vat is exhausted.

163. A vat which is still more simple and more easily prepared, has been recommended by Bergman. The proportion of the ingredients which he has directed to be employed is the following:—To three drachms of indigo reduced to powder, three drachms of copperas, and three of lime, add two pints of water. Let it be well raked, and in the course of a few hours it will be in a proper state for dyeing.

164. Haussmann employs a still less proportion of indigo. For about 500 gallons of water he takes thirty-six pounds of quick-lime, slaked in about twenty-five gallons of water, with which the indigo is to be mixed in the proportion of from ten to twenty pounds, well ground. He then dissolves thirty pounds of sulphate of iron in about fifteen gallons of water. The whole is left at rest for fifteen minutes; the vat is then filled, and gently and constantly stirred. When a deeper shade is wanted, and particularly when linen is to be dyed, the proportion of indigo should be greater; but the shade depends very much on the time the stuffs remain in the vat, and the times it has been used. When the vat becomes turbid, the process of dyeing must be interrupted, till it has been again raked, and the supernatant liquor become transparent. If the effects of the lime fail, a new quantity must be added; and, if the iron cease to produce the effect on the indigo, a new portion must be also added, observing to have a greater quantity of lime than is necessary to saturate the sulphuric acid.

165. When the indigo appears to be exhausted, fresh portions are to be added; the vat is to be raked several times, and allowed to settle, after which it is again fit for use. In this way Mr. Haussmann says he preserved a vat for two years; and had it not been for the accumulation of sediment, which prevented the stuffs from being immersed to a sufficient depth, it might have been continued in use for a much longer time. It is proper to add, that Mr. Haussmann found, that a pattern of cloth dipped in water acidulated with sulphuric acid, immediately after it was taken out of the bath, became of a much deeper blue than a similar pattern exposed to the air, or another dipped in river water.

166. A remarkably fine blue is produced from a solution of indigo in sulphuric acid, to which the name of Saxon blue is given, from the circumstance of its having been discovered at Grossenhayn in Saxony, by counsellor Barthi, about the year 1740.

167. The following, according to Berthollet, is the process of preparing this dye by Bergman. He employed one part of indigo to eight parts of acid, keeping the mixture in a temperature of between 86° and 104° of Fahrenheit, and he reckoned that one part of indigo, thus dissolved, was sufficient to give a deep blue color to 260 times its weight of wool. Poerner used one part of indigo to four of sulphuric acid. To prepare the wool or cloth for this bath, it is first boiled with alum and tartar. The wool receives the finest as well as fullest color during the first immersion; but lighter, though duller shades, may be given to other portions by the same bath when partially exhausted. The deeper shades are most advantageously given by adding the solution of indigo to the bath, in successive portions, and raising the stuffs on the winch previously to each addition.

Of Dyeing Red.

168. Red colors are known by different names according to their degrees of intensity, as crimson, scarlet, &c., besides innumerable shades that fall under no particular denomination. The substances usually employed in dyeing red, are cochineal, madder, kermes, lac, carthamus, Brasil-wood, archil, and logwood. All these, with

other substances which give a red color, are denominated by Dr. Bancroft *adjective* colors, from their requiring the aid of mordants to give them permanence.

169. *Of Dyeing Wool Red.*—When woollen stuffs are to be dyed, they are first boiled for two or three hours with alum and tartar: they are then left to drain, slightly wrung out, put into a linen bag, and carried into a cool place, where they must remain for some days. The quantities and proportions of the alum and tartar are varied according to the object of the dyer, and the shade of color which is wanted. Some recommend five ounces of alum, and one ounce of tartar to each pound of wool. By increasing the proportion of tartar to a certain degree, a deep and permanent cinnamon color is produced. This arises from the yellow tinge induced by the acid on the coloring particles of the madder. Others propose to diminish the proportion of tartar, and to use only a seventh part. In conducting the process of dyeing with madder, the bath should not be brought to a boiling heat, because, at that temperature, the fawn-colored particles would be dissolved, and a different shade obtained from that which is desired. When the water is at such a temperature as the hand can bear, Hellot recommends the addition of half a pound of grape madder for every pound of wool to be dyed. It must then be well stirred before the wool is introduced, which must remain for an hour without boiling, excepting for a few minutes towards the end of the process, that the combination of the coloring particles with the stuff may be more certain.

170. Madder reds are sometimes rosed, as it is called, with archil and Brasil wood. In this way they become more beautiful and velvety, but this brightness is not permanent. But madder reds, even when at best, are far inferior to those obtained from lac and cochineal, and even to that produced by kermes; but, as the expense of the materials is comparatively small, they are employed for coarse stuffs.

171. Different authors recommend different proportions of madder. Poerner proposes to employ one-third of the weight of the wool, while Scheffer limits the quantity to one-fourth. Poerner added to the alum and tartar a quantity of solution of tin, equal in weight to the tartar, and, after two hours boiling, allowed the cloth to remain in the bath, which had been left to cool for three or four days. He then dyed it in the usual way, and obtained a fine red. On another occasion he prepared the cloth by the common boiling, and dyed it in a bath slightly heated, with a larger proportion of madder, tartar, and solution of tin. The cloth remained twenty-four hours in the bath, and, when it had become cold, he put it into another bath, made with madder only, where it remained for twenty-four hours. By this process he got a fine red, somewhat brighter than the common, but inclining a little to yellow. Scheffer says that he obtained an orange red by boiling wool with a solution of tin, and one-fourth of alum, and then dyeing with one-fourth of madder. A cherry color, says Bergman, is obtained by using one part of a solution of tin, and two of madder, without previously boiling the wool. By exposure to the air, this color becomes deeper. By boiling the wool for two hours with one-fourth of sulphate of iron, then washing it, and afterwards immersing it in cold water with one-fourth of madder, and boiling it again for an hour, the result is a coffee color. But if the wool has not been soaked, and if it be dyed with one part of sulphate of iron and two of madder, the color is a brown approaching to red.

172. When sulphate of copper is employed as the mordant, the madder dye yields a clear brown, inclining to yellow; and a similar color may be produced by dyeing the wool simply soaked in hot water, with one part of sulphate of copper, and two of madder. But when this mordant and dye-stuff are used in equal proportions, the yellow is somewhat more obscure, inclining to green; and in both these instances, exposure to the air does not produce a darker color. Berthollet says that he employed a solution of tin in various ways, both in the preparation and the application of the madder; and, by the use of different solutions of tin, he found that, although the tint was a little brighter than what is obtained by the common process, it was always more inclined to yellow or fawn color.

173. *Of Dyeing Silk Red.*—The red color obtained from madder has not been found of sufficient brilliancy for dyeing silks; M. De la Folie, however, has given the following process for employing it for this purpose:—Half a pound of alum is to be dissolved in each quart of hot water, to which two ounces of potassa are to be added; after the effervescence is over, and the liquor has begun to grow clear, the silk must be soaked in it for two hours; it is then to be washed and put into the madder bath. Silk dyed in this way, he says, becomes more beautiful by the application of the soap proof. Another process is described by Mr. Gulichie, of which the following is the substance.—

174. For every pound of silk he proposes a bath of four ounces of alum, and one ounce of solution of tin. When the liquor has become clear, it is decanted, and the silk carefully soaked in it for twelve hours, after which it is to be immersed in a bath with half a pound of madder softened by boiling, with an infusion of galls in white wine. The bath must be kept moderately hot for an hour, and then made to boil for two minutes. The silk, being taken from the bath, is to be washed in a stream of water, and dried in the sun. The color thus produced is said to be very permanent; and, if the galls are omitted, its brilliancy is improved.

175. The color obtained when Brasil-wood is used, is denominated *false crimson*, to distinguish it from that produced by cochineal, which is much more durable, and which is styled *grain crimson*. This very beautiful color is obtained by the following process:—The silk, being well cleansed from the soap, is to be immersed in an alum bath of the full strength, and to remain for a night. It is then to be washed, and twice beetled at the river. The bath is prepared by filling a long boiler two-thirds with water, to which are added, when it boils, from half an ounce to two ounces of powdered white galls for every pound of silk. When it has boiled for a few moments, from two

to three ounces of cochineal, also powdered and sifted, for every pound of silk, are put in, and afterwards one ounce of tartar to every pound of cochineal. When the tartar is dissolved, one ounce of solution of tin is added for every ounce of tartar. In the preparation of this solution of tin, the following proportions are recommended by Macquer. For every pound of nitric acid two ounces of sal ammoniac, six ounces of fine grain tin, and twelve ounces of water are employed. When these ingredients are mixed together, the boiler is to be filled up with cold water, and the proportion of the bath, for every pound of silk, is about eight or ten quarts of water. In this the silk is immediately immersed, and turned on the winch till it appear to be of a uniform color. The fire is then increased, and the bath is kept boiling for two hours, observing to turn the silk occasionally. The fire is afterwards put out, and the silk put into the bath, where it is allowed to remain for a few hours longer. It is then taken out, washed at the river, twice beetled, wrung, and dried.

176. Carthamus, says M. Berthollet, is used for dyeing silk poppy, a bright orange red, cherry, rose color, and flesh color. The process differs according to the greater or less tendency to flame color that is wanted. The following is his account of the preparation of the carthamus bath: The yellow matter of the carthamus having been first extracted, the cakes containing the red coloring matter are broken down and put into a trough of fir-wood, where they are several times sprinkled with finely powdered soda in the proportion of six pounds of soda to every hundred pounds of carthamus. The whole is then put into a small trough lined with closely woven cloth, and having a grated bottom; this small trough is then placed over the larger one, and water is poured on the mixture till the larger trough is full. Fresh water is poured over the carthamus and suffered to run into another trough, and so on successively, adding a little fresh soda till all the red color is extracted. These liquors are then mixed, and lemon-juice is added to give a fine cherry color, which the liquor imparts to the silk that is dipped in it. Poppy-color, given in this way, requires that the silk be immersed in a second bath, and that the colors be brightened by turning the silk several times through a bath of hot water impregnated with lemon-juice. The lighter hues of red are given by the weaker solutions of carthamus, and the lightest shades require the addition of a little soap. In dyeing silk with carthamus the silk, after being scoured, should, for poppy or fire color, receive a ground of annotto. The carthamus bath should be prepared at the time of using, and the process of dyeing should be conducted as speedily as possible.

177. Those who have made the nearest approach towards producing a scarlet on silk, says Berthollet, begin with dyeing the silk crimson. It is then dyed with carthamus, and after that dyed yellow in a cold bath. By this process a fine color is produced, but it is not permanent, as the dye of the carthamus is affected by the action of the air. The following is the process given by Dr. Bancroft in his Philosophy of Permanent Colors. 'In a solution of muriosulphate of tin, diluted with five times its weight of water, the silk is to be soaked for two hours; and, after being taken out, it is to be wrung and partially dried. It is then to be dyed in a bath prepared with four parts of cochineal, and three of quercitron bark. In this way a color approaching to scarlet is obtained. To give the color more body, the immersion may be repeated both in the solution of tin and in the dyeing bath; and the brightness of the scarlet is increased by means of the addition of carthamus. A lively rose-color is produced by omitting the quercitron bark, and dyeing the silk with cochineal only; and, by adding a large proportion of water to the cochineal, a yellow shade is obtained, which changes the cochineal to the compound scarlet color.'

178. *Of Dyeing Cotton and Linen Red.*—Madder is employed for dyeing linen and cotton red, and even for giving them several other colors, by means of different mixtures. It is the coloring drug most useful for this kind of dyeing. It is proper therefore to show, in sufficient detail, the different methods by which this dye may be rendered more permanent, beautiful, and diversified in its effects. Linen takes the color of madder with more difficulty than cotton: but the processes which succeed best, with the one, are also preferable for the other.

179. Two species of madder red, on cotton, are distinguished; the one called simply madder red, the other, possessing far more lustre, is called Turkey-red, or Adrianople-red, because it was for a long time obtained from the Levant.

Vogler tried the effect of a great number of the substances employed as mordants, or in the dyeing bath, and he found that those which produced the best effect were glue, ox-gall, and other animal matters, as sheep's dung. Muriate of soda rendered the color faster, but more dull. Galling likewise procured a richer color. Other astringents, sumach and pomegranate rind, for instance, produced a similar effect. A little alkali added to the alum improves it. When the stuff has passed through the different preliminary operations, it must be dyed with the best madder that can be procured, in the proportion of three-quarters of a pound to each pound of stuff.

The temperature of the madder bath must be raised in a gradual manner, that may require about an hour to boil after the stuff has been immersed in it; and, when it has boiled a few minutes, the stuff is taken out, slightly rinsed, and dyed a second time in a second bath, with the same quantity of madder; after the second dyeing, and subsequent rinsing and drying, the stuff is commonly steeped in a solution of white soap, made just milk-warm, in the proportion of two ounces of soap to one pound of stuff. The effect of this process is to remove all the uncombined coloring matter, and, as is supposed, to give a higher degree of brilliancy to what remains. This process is completed by rinsing and drying.

180. Of all the reds produced by the use of madder, the Adrianople or Turke -red is by far

the most beautiful: it possesses a brilliancy which can be communicated to cotton by none of the common processes of dyeing, and has, moreover, the property of more effectually resisting the action of the different re-agents, as alkalis, soap, alum, and acids. For many years the dyeing of this color was confined to the east, and came to us through our Levant trade only. In process of time the art found its way from India to the western parts of Asia, and to Greece; and from Greece to France, whence it was brought to this country by one of the French dyers, M. Papillon, who settled at Glasgow, where, for a considerable time, he carried on with great success the business of dyeing Turkey-red.

181. M. Papillon communicated his process to the commissioners and trustees for manufactures in Scotland, to be by them published at the expiration of a certain term of years. For this he received a handsome premium; and the process was made public in the year 1803.

We need hardly mention the celebrity of the manufactory of Messrs. Monteith and Co. of Glasgow, since it is known to the world at large. The excellency and beauty of their cotton fabrics will not soon be surpassed; the madder-reds which they dye rival, in brilliancy and in solidity, any ever produced at Adrianople; and the white figures, distributed over the cloth by the discharging process, surpass in purity, elegance, and precision of outline, the original Bandana outlines.

182. The art of dyeing Turkey-red has been described by different writers, who vary a little from each other in some particulars, but who agree in the leading features of the process. We prefer inserting here the account of it as given by Dr. Bancroft, as it affords us an opportunity of following it up by the insertion of some of his truly valuable remarks upon the subject in reference to the process observed at Rouen in France.

The process is very tedious, and is divided by the dyers into nine different steps.

Step 1. Cleaning. For 100 pounds of cotton take an equal weight of Alicant barilla, twenty pounds of pearl-ashes, and 100 pounds of quick-lime. The barilla must be mixed with soft water in a deep tub, which has a small hole near the bottom of it, stopped at first with a peg.—This hole is covered in the inside with a cloth supported by two bricks, that the ashes may be prevented from passing through it or stopping it up while the lie filters through it.

Under this tub is another to receive the lie; and pure water is repeatedly passed through the first tub to form lies of different strength, which are kept separate at first until their strength is examined. The strongest required for use must swim an egg, and is called the lie of six degrees of the French hydrometer, or peseliqueur. The weaker are afterwards brought to this strength, by passing them through fresh barilla. But a certain quantity of the weak, which is of 2° of the above hydrometer, is reserved for dissolving the oil and gum, and the salt, which are used in subsequent parts of the process. This lie of 2° is called the weak barilla liquor, the other is called the strong.

Dissolve the pearl-ashes in ten pails, of four gallons each, of soft water, and the lime in fourteen pails.

Let all the liquors stand till they become quite clear, and then mix ten pails of each.

Boil the cotton in the mixture five hours, then wash it in running water and dry it.

Step 2. Take a sufficient quantity, say ten pails (of four gallons each), of the strong barilla water in a tub, and dissolve or dilute in it two pails full of sheep's dung; then pour into it two quart bottles of oil of vitriol, and one pound of gum arabic, and one pound of sal ammoniac, both previously dissolved in a sufficient quantity of the weak barilla water, and lastly, twenty-five pounds of olive oil, which has been previously dissolved or well mixed with two pails of the weak barilla water.

The materials of this steep being well mixed, tramp or tread down the cotton into it, until it is well soaked; let it steep twenty-four hours, and then wring it hard and dry it.

Steep it again twenty-four hours, and again wring and dry it.

Steep it a third time twenty-four hours, after which wring and dry it, and lastly wash it well and dry it.

Step 3. This part of the process is precisely the same with the last, except that the sheep's dung is omitted in the composition of the steep.

Step 4. Boil twenty-five pounds of galls, bruised, in ten pails of river water, until four or five are boiled away; strain the liquor into a tub, and pour cold water on the galls in the strainer, to wash out of them all their tincture.

As soon as the liquor is become milk-warm, dip your cotton hank by hank, handling it carefully all the time, and let it steep twenty-four hours.

Then wring it carefully and equally, and dry it well without washing.

Step 5. Dissolve twenty-five pounds of Roman alum in fourteen pails of warm water, without making it boil; skim the liquor well, and add two pails of strong barilla water, and then let it cool until it be lukewarm.

Dip the cotton, and handle it hank by hank, and let it steep twenty-four hours, and wring it equally and dry it well without washing.

Step 6. Is performed in every particular like the last; but after the cotton is dry, you steep it six hours in the river, and wash and dry it.

Step 7. The cotton is dyed by about ten pounds at once, for which take two gallons and a half of ox blood, and mix it in the copper with twenty-eight pails of milk-warm water, and stir it well; then add twenty-five pounds of madder, and stir all well together. Then, having beforehand put the ten pounds of cotton on sticks, dip it into the liquor, and move and turn it constantly one hour, during which you gradually increase the heat, until the liquor begin to boil at the end of the hour. Then sink the cotton, and boil it gently one hour longer; and, lastly, wash it and dry it.

Take out so much of the boiling liquor, that what remains may produce a milk-warm heat with the fresh water with which the copper is again filled up, and then proceed to make up a

dyeing liquor as above, for the next ten pounds of cotton.

Step 8. Mix equal parts of the gray steep liquor, and of the white steep liquor, taking five or six pails of each. Tread down the cotton into this mixture, and let it steep six hours, then wring it moderately and ecually, and dry it without washing.

Step 9. Ten pounds of white soap must be dissolved most carefully and most completely in sixteen or eighteen pails of warm water; if any little bits of the soap remain undissolved they will make spots in the cotton. Add four pails of strong barilla water, and stir it well. Sink your cotton in this liquor, keeping it down with cross sticks, and cover it up and boil it gently two hours, then wash and dry it, and it is finished.

Such is the process of M. Papillon, on which Dr. Bancroft makes the following observations.

Step 1. At Rouen two courses of operations are practised to produce the Turkey-red. One is called the gray course, and the other the yellow course. In the former, the cotton, after being alumed, receives no more oil, but goes to the dyeing vessel, retaining the gray color, which naturally results from its being impregnated with alum and galls in combination. But, in the yellow course, the cotton, after being alumed, is again immersed in the oleaginous mixtures or steeps, by which it acquires a yellow color. The gray course may consist either of fifteen steeps or of nineteen, and the yellow of twenty. The first of these courses has most similitude to that of M. Papillon. At Rouen, the cleansing operation is performed with a very weak lie of soda, of only one degree of the areometer, employing 150 gallons to 100 pounds of cotton, which is to be boiled therein six hours, then drained, well rinsed in running water, and afterwards dried. This operation is intended to free the cotton from all impure or extraneous matter; but not to produce effects like those of bleaching by exposure upon the grass, which, until lately, it was believed, would lessen the durability of the colors to be subsequently dyed.

Step 2. The steep here described contains three ingredients not employed by any other person; and one of these, the sulphuric acid, seems to indicate a want of chemical knowledge in M. Papillon, because, by neutralising the soda, it must obstruct the effect which the latter is intended to produce (that of rendering the oil miscible with water), or at least render a greater proportion of it necessary in order to obtain that effect. In regard to the other two ingredients, viz. the gum and sal ammoniac, the quantity of the former is by much too small to produce any considerable effect, and it is not easy to form any conjecture what purpose the latter is to answer. At Rouen, this steep is prepared by steeping twenty-five or thirty pounds of sheep's dung several days in a lie of soda, marking four degrees, which is to be diluted until it amounts to forty gallons; and the dung being squeezed and broken by the hands, is afterwards made to pass through a copper pan, provided with numerous small holes, into a tub containing twelve pounds and a half of fat oil, and in this the oil and dung are, by sufficient stirring, to be well mixed with the lie and with each other; and, in the mixture, which contains but half the quantity of oil prescribed by M. Papillon, the cotton is to be steeped, &c., as directed by the latter. It is highly important that, after this and each of the succeeding operations, the cotton should be thoroughly and completely dried by a stove heat.

Step 3. At Rouen this steep is prepared by mixing thirty-eight gallons of lie of soda with ten pounds of olive oil, stirring until the mixture becomes uniformly milky; which it will do without any separation of the oil, if the quality of the oil be suited to this use; this they add to what may have been left of the former steep, and, after mixing them properly, they impregnate the cotton by the usual treatment, drying it, after an interval of twelve hours, first in the open air, and afterwards by a stove heat. This steeping and subsequent drying must be repeated once, twice, or three times, according to circumstances.

Between this white steep and the following gall steep, it is the practice at Rouen to employ three salt steeps and one cleansing operation. In the first, twenty-four gallons of the lie of soda, marking two degrees and a half, are mixed in a tub with the remnant of the white steep; and the cotton is impregnated and dried, as in the former operations. In the next the remnant of the last steep is mixed with twenty gallons of the lie of soda, marking three degrees; and the cotton is steeped and dried as before. In the third, the remnant of the preceding steep is mixed with twenty-four gallons of the lie of soda, marking three degrees and a half, and with this the cotton is impregnated and dried as before. The residuum of this steep is preserved to be used in the brightening operation.

In the cleansing operation, the cotton is steeped one hour in lukewarm water, then wrung by hand, and afterwards washed in a stream of water to remove any superfluous oil which might obstruct the equal application and uniform effect of the following gall-steep, and thereby render the color unequal. After being so washed, the cotton is dried first in the open air, and afterwards by a stove-heat.

Step 4. This constitutes the eighth operation in the gray course at Rouen, where, as well as in M. Papillon's process, galls, in sorts, seem now to be employed. At Rouen, the cotton, as soon as it has sufficiently imbibed the soluble matter of the galls, and been very moderately wrung, is spread as expeditiously as possible in the open air, if the weather be dry, or, if not, under cover; but the drying is always finished by a stove heat.

Step 5. At Rouen, thirty or thirty-five pounds of the purest alum are commonly employed for this steep, with only seven pails of hot-water, adding, when the alum has been dissolved, two gallons only of the lie of soda, marking four degrees. But when these proportions are employed, the cotton is not subjected to a second steep with alum. Sometimes, however, at Rouen, two steeps with the aluminous mordants are employed; and in that case twenty pounds of alum are dissolved for the first, and fifteen for the se-

cond, leaving an interval of two days between them, during which the cotton should retain its moisture after being slightly wrung from the first steep. It should, however, be well dried before it goes into the second.

Step 6. At Rouen, the cotton is dyed in parcels of twenty-five pounds each, and the dyeing vessel is of a quadrangular form, containing about 100 gallons of liquor. One quart of ox-blood is employed for each pound of cotton, with two pounds of Provence madder, or one pound of this with one of Smyrna madder. Some persons, however, think it best to effect the dyeing by two separate operations, employing half the above proportion of madder for one dyeing, and half for the other; but always taking care not to dry the cotton between the dyeings. There are some at Rouen who give cotton another alum steep between these dyeing operations, employing for that purpose half as much alum as was used for the first steep, and afterwards washing, &c.

Step 8. For this steep they employ at Rouen the residuum of the third salt-steep before mentioned; but the application of it is considered a part of the following step.

Step 9. This constitutes the fourteenth operation in the first set of gray courses at Rouen; where, after having macerated the cotton with the sikiou, they boil it for the space of five or six hours with six or eight pounds of white soap, previously dissolved in 145 gallons of water, in a vessel covered at the top, so as to leave only a very small opening for the necessary escape of the steam, which might otherwise occasion an explosion. The effect of this boiling with soap, is to dissolve and separate from the cotton all the yellowish-brown matter of the madder color which may have been applied to it in the dyeing operation, and thus to change the color from the dull brownish-red which it would otherwise retain, to a bright lively color, nearly equal to that of the finest cochineal scarlet. It is only by the singular degree of fixity which the pure red part of the madder color acquires, in consequence of the operations just described, that this beautiful red can be obtained. Such, indeed, is the stability of the Turkey-red when well dyed, that it is said to sustain boiling with soap for thirty-six hours without injury.

In addition to the steps prescribed by M. Papillon, they employ another at Rouen, which is intended to make the red incline more to the rose color, and at the same time increase its vivacity. For this operation, with the former quantity of 100 pounds of cotton they dissolve, in 145 gallons of water, sixteen or eighteen pounds of white soap, and as soon as the liquor begins to boil, they add to it from one pound and a half to two pounds of the crystallised muriate of tin, previously dissolved in two quarts of water, and mixed with eight ounces of single aqua-fortis; and having equally dispersed this mixture through the boiling solution of soap, by stirring, &c., the cotton is put in and boiled with the same precautions as in the brightening operation, till the desired effect has been obtained, which is to be discovered by frequent examinations. Care must be taken not to employ more nitric acid or aqua-fortis than the quantity here mentioned, lest it should decompose the soap, and cause the oil to separate and rise to the surface of the liquor.

183. We cannot leave this truly important branch of dyeing without noticing the ingenious remarks of Mr. Thomson of Glasgow, published in the eighth volume of the Annals of Philosophy, on the theory of the Turkey-red process.

He observes that silk and worsted have a natural varnish which cotton does not possess. To supply this defect, the repeated immersions, followed by exposure to the atmosphere, and to the heated air of a stove, may give the oil the proper consistency, by the absorption of oxygen, for forming a varnish, with which the coloring matter unites, and through which it may be said to shine, which causes that superior brilliancy which the goods attain when they are cleared, or, as it may be called, polished. I therefore presume, that the fixedness and brilliancy of the color will depend on the quantity of oil imbibed, as every repetition of drying presents new fibres to be varnished with an additional quantity; for I have always found, that the permanency was in proportion to the number of manipulations in the saponaceous liquor, and a proportionable freedom could also be used in reducing or clearing. The white immersions, omitting the sheep's dung, are just applying successive coats of varnish. Clearing is never attempted from the madder copper, without immersing the goods again in soda and oil, and drying them in a stove, which I consider to be also supplying them with an additional coat.

The alkaline lie occasions a greater separation in the particles of the oil, by which it combines more closely with the fabric of the cloth. The sheep's dung in the first immersions may serve as a covering, to keep the goods moist for a considerable time, that they may more fully imbibe the liquor, by preventing the evaporation from being too quick in the great heat to which they are exposed.

After the frequent immersions the cloth feels like leather, no doubt from a superfluity of liquor. It is then steeped in a lie of carbonate of soda, and afterwards well washed and dried, as a preparation for the galling and aluming. The astringent principle has been long known for darkening and fixing common red colors on cotton, by uniting with the earth of alum, and strengthening the basis. To the use of blood in the madder copper I attribute nothing; as in the rancid and putrid state in which I have seen it used, were it not for the prejudice of the operator, it might be safely dispensed with.

In proof of the above idea, that it is only the oil uniting with the earth of alum that is of use, I may refer to the mode of dyeing that color in the east, quoted by Dr. Bancroft, viz. soaking their cotton in oil (no matter of what description), during the night, and exposing it to the sun and air during the day, for seven successive days, rinsing it only in running water, and then immersing it in a decoction of galls and the leaves of sumach previous to aluming.

I would therefore request the practical dyer, who wishes to arrive at a knowledge of this unaccountable process, to give up the idea of ani-

malisation, if by it be meant impregnating the cloth with an animal matter, and by the power of the microscope, or any better method, look for the whole truth from some other source than chemical analysis. I am at present inclined to believe that it is a mechanical operation united to a chemical, and that the frequent immersions in the imperfect soap are equivalent to laying on the first, second, third, &c., coats, preparatory to finishing a fine painting in oil. A very eminent calico manufacturer, whom I consulted on the Turkey-red process, assured me that the only essential mordants are oil and alumina; and that bright and fast reds, equal to any produced by the usual complicated process with sheep's dung, galls, and blood, may be obtained without these articles.

Of Dyeing Scarlet.

184. Scarlet may be regarded as one of the compound colors arising from a mixture of the red and yellow coloring matters. Scarlet is the finest and most splendid of all the colors, and the great demand for it has excited several chemists of distinction to improve and facilitate the process of producing it. We shall here briefly notice the old method of dyeing scarlet, which is still practised by some dyers, both in this country and on the continent, and then give the improved method proposed by Dr. Bancroft in his excellent treatise already mentioned.

185. We cannot, says M. Berthollet, expect to obtain the desired shade from the doses prescribed in the processes, from variations in the quantity of the coloring particles contained in the different kinds of fine cochineal, and particularly from the solutions of tin that are used differing considerably from each other; but the just proportions of the ingredients to be employed may be readily determined by trials in the small way, so as to obtain the shade called for; and, if the pieces which are dyed be above or below this shade, it is not difficult to find the suitable proportions.

186. In the process of dyeing scarlet two operations are observed, viz. the boiling, and the reddening. The first or boiling operation is thus conducted:—For 100 pounds of cloth, a quantity of soft water is heated in a tinned boiler, till it be rather more than lukewarm, after which six pounds of cream-of-tartar are dissolved in it. When the water is a little warmer, half a pound of finely powdered cochineal is added and well mixed with the solution of tartar. Immediately after, five pounds of very clear solution of tin are poured in, and carefully mixed. When the bath begins to boil, the cloth is put in, and rapidly turned two or three times with the winch, then more slowly, and is left to boil for two hours, after which it is taken out, drained, exposed to the air, and washed in the running stream.

187. In preparing for the second bath the boiler must be emptied, filled again with fresh water, and, when this is near the boiling heat, five pounds and three quarters of powdered cochineal are put in and carefully mixed, and when, on ceasing to stir the liquor, a crust forms on the surface, and begins to break, thirteen or fourteen pounds of solution of tin are poured in. Sometimes, after this, the liquor begins to rise above the brim of the boiler, which must be prevented by putting in some cold water. When the solution is well mixed in the bath, the cloth is immersed, taking care to turn the winch rapidly for the first two or three turns. It is then to be boiled for about an hour, pressing it down as often as it rises to the surface. After this it is taken out, exposed to the air to cool, washed in the stream, and dried.

188. On examining the proportions of cochineal and of solution of tin, used either in the boiling, or in the reddening, it appears that they are by no means fixed. There are some dyers, who, according to Hellot's account, succeed very well by putting two-thirds of the composition, and a fourth of the cochineal, into the boiling, and the remaining third of the composition, with the remaining three-fourths of the cochineal, into the reddening. He also asserts that it does no harm to use tartar in the reddening, provided not more of it than half the weight of the cochineal be put in; and he thinks, that it even renders the color more permanent. Some dyers do not take the cloth out of the boiling, but simply refresh it to make the reddening in the same bath, by pouring in an infusion of cochineal, which they have made apart, and with which they have mixed the proper quantity of composition. In this way they save time and fuel: and they affirm that the scarlet is equally fine.

189. Different authors recommend different proportions of the materials used in the boiling process. Scheffer prescribes one part of solution of tin for ten parts by weight of cloth, with an equal quantity of starch and of tartar as of solution. He remarks, that the starch tends to make the color more uniform, and he recommends to throw into the water, when it boils, $\frac{1}{128}$ of cochineal; to agitate well; to let the wool boil in it for an hour, and then to wash it. He prescribes next, the boiling for half an hour in the bath, which serves for the reddening, with $\frac{1}{32}$ of starch, $\frac{1}{24}$ of solution of tin, $\frac{1}{32}$ of tartar, and $\frac{1}{18}$ of cochineal.

It appears, that Scheffer employs a much smaller quantity of solution of tin than Hellot; but what he does employ contains much more tin.

190. Poerner describes three principal processes, according as the shade is to be more or less deep, or more or less of an orange hue, which he wishes to give to the scarlet. He varies the proportions of the solution of tin, of cochineal, and tartar, or omits the last ingredient.

For conducting the process of the scarlet dye in the most beneficial manner, and for varying its results, according to the end in view, the effect of each of the ingredients employed in it must be ascertained. We need not however proceed with a detail of processes which have been superseded by others that are from experience found to be much superior; we shall therefore pass on to notice the important improvements in this branch of dyeing made by Dr. Bancroft, and which have obtained the approbation of the most eminent chemists, British and foreign.

191. Dr. Bancroft was struck with the thought that for a whole century no improvements had

been made in the art of dyeing scarlet. On this object he seems to have fixed his mind, and, about the year 1786, he instituted a set of experiments which were attended with the most gratifying success.

192. Having, by frequent affusions of boiling water, extracted the whole of the coloring matter from powdered cochineal, he found that the addition of a little potash to the sediment, and a fresh quantity of boiling water, extracted a new portion of coloring matter, equal to about one-eighth of what had been given out to the pure water. He repeatedly extracted this coloring matter by means of potassa, and afterwards dyed small pieces of cloth scarlet with it, which he found similar to others dyed with cochineal. It was in the course of these enquiries that he perceived scarlet to be a compound color, consisting of about three-fourths of pure crimson, and one-fourth of pure bright yellow. He conceived, therefore, that when the natural crimson of the cochineal is made scarlet, by the usual process, there must be a change produced, equivalent to a conversion of one-fourth of the coloring matter of cochineal from its natural crimson to a yellow color. From this he concluded that there might be a great saving of cochineal, by substituting a cheaper substance, which, at the same time, might yield a better yellow color. It was therefore his object to combine with this crimson or rose color, a suitable portion of a lively golden yellow, capable of being permanently fixed, and reflected by the same basis. This yellow Dr. Bancroft found in quercitron bark; and ascertained that it possessed the advantage of being not only the cheapest, but the brightest of all the yellows he had tried.

193. For the purpose of diminishing the quantity of cochineal employed in producing a scarlet dye, Dr. Bancroft made a number of experiments under the authority of government. In these experiments, the mordant used was the common dyers' spirit, or the nitro-muriate of tin, but he found that they were not attended with the advantages which he expected. In some of his earliest experiments, he remarks, that the solution of tin by means of sulphuric acid destroys the cochineal color, and this led him to reject the use of this acid, till accident brought him to dissolve a quantity of tin in muriatic acid, combined with one-fourth of sulphuric acid. The application of this solution in dyeing, was not accompanied with the corrosive effects of the muriate and nitro-muriate which he had employed in the experiments, and which proved unsuccessful. After trying different proportions of these acids, he found the following to answer best. In a mixture of two pounds of sulphuric acid of the ordinary strength, and about three pounds of muriatic acid, he dissolved about fourteen ounces of tin. The muriatic acid is first poured upon a quantity of granulated tin in a suitable vessel, and the sulphuric acid is added by degrees. This solution is more quickly effected by means of a sand heat; it is perfectly colorless, and may be kept for years without precipitation. It has double the power of the common dyers' spirit; and is produced at about one-third of the expense. It also raises the colors more than even the tartrate of tin; and does not incline the cochineal crimson to the yellow shade.

194. In using this solution as a mordant, to produce the compound scarlet color, Dr. Bancroft advises the following process. Nothing, says he, is necessary, but to put the cloth, suppose 100 pounds, into a proper tin vessel, nearly filled with water, in which has been mixed eight pounds of the murio-sulphuric solution of tin; and, having brought the mixture to a boiling heat, about 100 pounds of cloth are immersed and turned through it as usual, by the winch, for a quarter of an hour. Then the cloth is removed, and four pounds of cochineal and two pounds and a half of quercitron-bark, both powdered, are introduced and well mixed. After this, the cloth is returned into the bath, the liquor is made to boil, and the cloth is turned as usual for fifteen or twenty minutes, by which time, in general, the color will be properly raised and the bath exhausted, when the cloth is taken out and rinsed in the ordinary way.

By this method the time, labor, and fuel, necessary for filling and heating the boiler a second time are saved, the process finished much sooner than in the common way, and there is a saving of all the tartar, as well as of two-thirds of the cost of spirit, or nitro-muriatic solution of tin, which, for dyeing 100 pounds of wool, commonly amount to ten shillings, whereas eight pounds of the murio-sulphuric solution cost only about three shillings. There is, besides, a saving of at least one-fourth of the cochineal usually employed, and the color produced does not prove inferior in any respect to that dyed with much more expense and trouble in the ordinary way.

195. When a rose color is wanted, it may be readily obtained in this way, only omitting the quercitron bark, instead of the complex method of first producing a scarlet, and then changing it to a rose by the volatile alkali contained in stale urine, set free by potash or by lime; and should any one still choose to continue the practice of dyeing scarlet without the quercitron bark, it is only necessary to employ the usual proportions of tartar and cochineal, with a suitable quantity of the murio-sulphate of tin, which, while it is cheaper, is much more effectual than the dyers' spirit.

196. The scarlet, produced from cochineal crimson and quercitron, is also attended with this advantage, that it may be dyed upon wool and woollen yarn, without any danger of its being changed to a crimson color by the process of fulling, which always happens to scarlet dyed in the common way. Indeed, this last is nothing but a crimson or rose color, rendered yellow by some particular action of the tartaric acid; and is hence liable to be reduced to crimson by many chemical agents, especially by soap, alkaline salts, salts of lime, &c. But where the coloring matter of cochineal is applied and fixed merely as a crimson or rose color, and is rendered scarlet by adding a very permanent yellow, capable of resisting the strongest acids and alkalis, when used with solutions of tin, no such

change takes place, because the color given by cochineal, having never ceased to be crimson, cannot be rendered more so, and therefore cannot suffer by those impressions or applications which frequently change or spot scarlets dyed according to the ordinary practice. There is also a remarkable property attending the compound scarlet dyed with cochineal and quercitron bark, viz. that if a piece of cloth dyed in this way be compared with another piece dyed by the usual process, both will by day-light appear exactly of the same shade; but, if they be afterwards compared together by candle-light, the former will appear at least several shades higher and fuller than the latter;—a circumstance of some importance, when it is considered how much this and other gay colors are worn and exhibited by candle-light, during a considerable part of the year.

197. To illustrate more clearly, continues Dr. Bancroft, the effects of the murio-sulphuric solution of tin with cochineal in dyeing, I shall state a very few of my numerous experiments therewith; observing, however, that they were all several times repeated, and always with similar effects.

1st, I boiled 100 parts of woollen cloth in water, with eight parts of the murio-sulphuric solution of tin, during the space of ten or fifteen minutes; I then added to the same water four parts of cochineal, and two parts and a half of quercitron bark in powder, and boiled the cloth fifteen or twenty minutes longer; at the end of which time it had nearly imbibed all the color of the dyeing liquor, and received a very good, even, and bright scarlet. Similar cloth dyed of that color at the same time in the usual way, and with a fourth part more of cochineal, was found upon comparison to have somewhat less body than the former; the effect of the quercitron bark in the first case having been more than equal to the additional portion of cochineal employed in the latter, and made yellow by the action of tartar.

2d, To see whether the tartrite of tin would, besides yellowing the cochineal crimson, contribute to raise and exalt its color more than the murio-sulphate of that metal, I boiled 100 parts of cloth with eight parts of the murio-sulphuric solution, and six parts of tartar, for the space of one hour; I then dyed the cloth, unrinsed, in clean water, with four parts of cochineal, and two parts and a half of quercitron bark, which produced a bright aurora color, because a double portion of yellow had been here produced, first by the quercitron bark, and then by the action of tartar upon the cochineal coloring matter. To bring back this aurora to the scarlet color, by taking away or changing the yellow produced by the tartar, I divided the cloth whilst unrinsed into three equal parts, and boiled one of them a few minutes, in water slightly impregnated with potassa; another in water with a little ammoniac; and the third in water containing a very little powdered chalk, by which all the pieces became scarlet; but the two last appeared somewhat brighter than the first, the ammoniac and chalk having each rosed the cochineal color rather more advantageously than the potassa. The best of these, however, by comparison, did not seem preferable to the compound scarlet dyed without tartar, as in the preceding experiment; consequently this did not seem to exalt the cochineal color more than the murio-sulphate of tin; had it done so, the use of it in this way would have been easy, without relinquishing the advantages of the quercitron yellow.

3d, I boiled 100 parts of woollen cloth with eight parts of the murio-sulphuric solution of tin, for about ten minutes, when I added four parts of cochineal in powder, which, by ten or fifteen minutes more of boiling, produced a fine crimson. This I divided into two equal parts, one of which I yellowed, or made scarlet by boiling it for fifteen minutes with a tenth of its weight of tartar in clean water; and the other, by boiling it with a fortieth part of its weight of quercitron bark, and the same weight of murio-sulphuric solution of tin; so that in this last case there was an addition of yellow coloring matter from the bark, whilst in the former no such addition took place, the yellow necessary for producing the scarlet having been wholly gained by a change and diminution of the cochineal crimson; and the two pieces being compared with each other, that which had been rendered scarlet by an addition of quercitron yellow, was, as might have been expected, several shades fuller than the other.

4th, I dyed 100 parts of woollen cloth scarlet, by boiling it first in water with eight parts of murio-sulphate of tin, and twelve parts of tartar, for ten minutes, and then adding five parts of cochineal, and continuing the boiling for fifteen minutes. This scarlet cloth I divided equally, and made one part crimson, by boiling it with a little ammoniac in clean water; after which I again rendered it scarlet, by boiling it in clean water, with a fortieth of its weight of quercitron bark, and the same weight of murio-sulphate of tin; and this last, being compared with the other half to which no quercitron yellow had been applied, was found to possess much more color, as might have been expected. A piece of the cloth, which had been dyed scarlet by cochineal and quercitron bark, as in the first experiment, being at the same time boiled in the same water with ammoniac, did not become crimson, like that dyed scarlet without the bark.

In this way of compounding a scarlet from cochineal and quercitron bark, the dyer will at all times be able, with the utmost certainty, to produce every possible shade between the crimson and yellow colors, by only increasing or diminishing the proportion of bark. It has indeed been usual at times, when scarlets approaching nearly to the aurora color were in fashion, to superadd a fugitive yellow either from turmeric, or from what is called young fustic; but this was only when the cochineal color had been previously yellowed as much as possible by the use of tartar, as in the common way of dyeing scarlet; and therefore that practice ought not to be confounded with my improvement, which has for its object to preclude the loss of any part of the cochineal crimson, by its conversion towards yellow color, which may be so much more cheaply

obtained than the quercitron bark. By sufficient trials, I have satisfied myself that the cochineal colors, dyed with the murio-sulphuric solution of tin, are in every respect at least as durable as any which can be dyed with any other preparation of that metal; and they even seem to withstand the action of boiling soap lie somewhat longer, and therefore I cannot avoid earnestly recommending its use for dyeing rose and other cochineal colors, as well as for compounding a scarlet with the quercitron bark.

Of Dyeing Crimson.

198. The different processes employed for obtaining the various shades of crimson, from the deepest to the lightest, may be reduced to two. Either the shade of crimson required is given to cloth previously dyed scarlet, or the cloth is at once dyed crimson. Alum, salts with earthy bases, and fixed and volatile alkalis, have the property of changing the color of scarlet to crimson, which is the natural color of cochineal. Nothing more, therefore, is necessary, than to boil cloth dyed scarlet for about an hour in a solution of alum, proportioned in strength to the deepness of the color desired. But as other salts with earthy bases have the same property, and water contains more or less of these salts, whence it gives a proportionate rosy tinge to scarlet passed through it, particularly if it be worn, the quantity of alum necessary to obtain a crimson varies according to the nature of the water employed; and, when well charged with these salts, it will answer the purpose of itself, without the addition of alum. If a piece of scarlet have any defects, it is most convenient to convert it into a crimson.

199. Hellot says, that he has tried soap, soda, potassa, and crude potassa; that all these substances produced the crimson desired, but saddened it, and gave it less lustre than alum. Ammonia, on the contrary, produced a very good effect; but, as it evaporates quickly, a considerable quantity must be put into the bath a little more than warm, a little ammoniacal muriate, or sal ammoniac, and common potash. By this method the cloth instantly took a very bright rosy color. He thinks that it heightens the color so much as to render less cochineal necessary. But M. Poerner, who gives the same process, directs the scarlet to be left twenty-four hours in a cold solution of potassa and ammoniacal muriate.

200. To dye crimson at once, a solution of two ounces and a half of alum, and one ounce and a half of tartar, to every pound of cloth, is used for the boiling: and the cloth is afterwards dyed with an ounce of cochineal. Solution of tin is commonly added, but in less proportion than for scarlet. The processes employed vary greatly, according as the shade required is deeper or lighter, or more or less distant from scarlet. Common salt is also used for the boiling by some dyers. For saddening crimsons, and giving them more bloom, archil and potassa are frequently used, but the bloom thus imparted is not permanent. Sometimes the boiling for crimson is made after a scarlet reddening, by adding tartar and alum: and it is said, that the wine soup color has more bloom, if both its boiling and reddening be made after scarlet, than when it is dyed in a fresh bath. For these colors the wild cochineal may be used instead of the fine, but in greater quantity. The reddening which has been used for crimson may also be employed for purples, and other compound colors.

Both scarlets and crimsons in half-grain are made by substituting madder for half the quantity of the cochineal, giving the same boiling as for scarlet in grain, and following in other respects the processes for reddening the scarlet or crimson. Other proportions of madder may be used instead of half, according to the effect desired. The common madder red also acquires a greater lustre, when its boiling is made after a reddening for scarlet.

201. In silk the grain crimson, produced by cochineal, is distinguished from false crimson, which is obtained by Brasil-wood. Silks that are intended to be dyed crimson with cochineal, should not be boiled with more than twenty pounds of soap to 100 pounds of silk, as the slight yellow cast which silk has, when only so far scoured, is advantageous to the color. After the silk has been well cleansed from the soap, it is to be put into an alum liquor of the full strength. In this it is commonly left from the evening till the next morning; it is then washed, and twice beetled at the river. In preparing the bath, an oblong boiler is filled with water, to about one-half or two-thirds; and, when the water boils, white galls powdered are thrown in, from half an ounce to two ounces for every pound of silk. After boiling a few moments, from two to three ounces of cochineal, powdered and sifted, for every pound of silk, according to the shade required, are put in, adding afterwards an ounce of tartar, to every pound of cochineal; and, when the tartar is dissolved, an equal quantity of the solution of tin. This solution ought to contain more tin than that used for scarlet, otherwise the colors will be too bright. Macquer directs this solution to be made with sixteen parts of nitric acid, two of ammoniacal muriate, as much fine grain tin, and twelve of water These ingredients are mixed and the boiler is filled up with cold water. In this the silk is immediately dipped, and turned on the skein sticks till it appears to be of a uniform color. The fire is then increased, and the bath made to boil for two hours, turning the silk from time to time. After this the fire is put out, and the silk put into the bath, where it is kept a few hours longer. The silk is afterwards washed at the river, twice beetled, wrung and dried. When crimsons are to be browned, they must be passed, after having been washed, through a solution of sulphate of iron, more or less strong according to the shade required. If it should have a yellow tinge, the solution must be charged with a greater or less proportion of decoction of fustet or Venus's sumach. White galls should be chosen, because black ones would dull the color of the crimson; and even too large a quantity of the white will produce the same effect. Macquer says, that the galls serve only to increase the weight of the silk: yet their general effect is to render colors

more permanent, and they are essentially necessary for crimsons that are intended to be browned. Vinegar is employed as a test in distinguishing grain crimsons from false: but it will not detect colors obtained from Brasil-wood, if they be fixed by means of solution of tin; for in this case they resist vinegar as well as those made with cochineal. A very small quantity of solution of tin is, therefore, put into the bath for dyeing silk crimson. If the same process as that for dyeing wool scarlet were employed, the silk would lose its bloom, and acquire only a faint color. Macquer and Scheffer have, however, detailed processes which differ from it only in a few circumstances, for dyeing silk rose and poppy colors by solution of tin, used cold, that its action on the silk might not be too powerful.

202. Brasil-wood is used for dyeing silk what is called false crimson, to distinguish it from that produced by cochineal, which is much more permanent. For this process the silk should be boiled with soap, in the proportion of twenty pounds of the latter to 100 pounds of the former, and afterwards alumed. Less aluming is required for this than for grain crimson. Having washed it in running water, it is dipped in a bath, more or less charged with Brasil juice, according to the shade to be given. In the preparation of the bath hard water is preferable to soft, as it produces with the dye-stuffs a fuller crimson. Washing the silk in hard water will produce nearly the same effect. In order to make false crimson deeper, or dark red, a decoction of logwood is added to the Brasil bath, after the silk has been impregnated with the latter. A little alkali may also be put in according to the shade required. But to imitate poppy or fire color, the silk must have an anotta ground, even deeper than when it is to be dyed with carthamus: after which it is washed, alumed, and dyed with the decoction of Brasil-wood, to which a small portion of soap is generally added. We might here enumerate several other processes for imparting the crimson color, but the above, with what we have said respecting the dyeing of reds in general, and of scarlet in particular, render it unnecessary to enlarge.

Of Dyeing Yellow.

203. *Of Dyeing Wool Yellow.*—The yellow communicated to wool by weld has little permanency, if the wool be not previously prepared by some mordant. For this purpose alum and tartar are used, by means of which this plant gives a very pure and durable yellow. For the boiling, which is managed in the common way, Hellot advises four ounces of alum to every pound of wool, and only one ounce of tartar; many dyers, however, use half as much tartar as alum. Tartar renders the color paler, but more lively. The weld is boiled in a fresh bath, enclosing it in a bag of thin linen, and keeping it from rising to the top by a heavy wooden cross. Some dyers boil it till it sinks to the bottom of the copper, and then let a cross down upon it: others, when it is boiled, take it out with a rake, and throw it away. From three to four pounds of weld, and, in some instances less, are allowed for every pound of stuff; but the quantity must be regulated by the depth of shade required. Some dyers add a little quick-lime and ashes, which are found to promote the extraction of the coloring matter, and at the same time heighten the color; but they thus render it more liable to the action of acids.

204. Both lighter and brighter shades may be obtained by dyeing after deeper ones, adding water at each dipping, and keeping the bath boiling: but light shades procured in this way are not so lively as when fresh baths are used, proportioning the quantity of weld to the depth of the shade intended to be procured. If common salt be added to the weld bath, it renders its color richer and deeper: sulphate of lime, or gypsum, also deepens it: but alum renders it paler and more lively; and tartar, still paler. Sulphate of iron or vitriol makes it incline to brown.

205. According to Scheffer, by boiling the stuff for two hours with one-fourth of its weight of a solution of tin, and the same proportion of tartar, and then washing it and boiling it for about a quarter of an hour with an equal weight of weld, it will assume a fine yellow, which, however, will not penetrate the substance of cloth.

206. Poerner recommends a process similar to that used in dyeing scarlet, by which means the color is brighter and more permanent.

207. Since the introduction of the use of quercitron bark, the process of dyeing yellow has been much simplified, as may be seen from the following directions of Dr. Bancroft on the subject. He proposes that the bark should be boiled with about its own weight, or one-third more of alum, in a suitable quantity of water, for about ten minutes.

208. The substances to be dyed are previously scoured, and then immersed in the bath, observing to give the higher colors first, and afterwards the paler straw colors. By this cheap and expeditious process, colors which are not wanted to be of a full or bright yellow, may be obtained. The color may be considerably heightened by passing the unrinsed stuff a few times through hot water, to which a little clean powdered chalk, in the proportion of about a pound and a half for every 100 pounds of stuff has been previously added. The bark, when used in dyeing, being first reduced to powder, should be tied up in a thin linen bag, and suspended in the liquor, so that it may be occasionally moved through it, to diffuse the coloring matter more equally.

209. But although this method possesses the advantages of cheapness and expedition, and is sufficient for communicating pale yellows; to obtain fuller and more permanent colors, the common mode of preparation ought to be preferred. The stuff should be boiled for about one hour, or an hour and a quarter, with one-sixth, or one-eighth of its weight of alum, dissolved in a proper proportion of water. The stuff is then to be immersed, without being rinsed, into the dyeing bath, with clean hot water, and about the same quantity of powdered

bark tied up in a bag, as that of the alum employed in the preparation. The stuff is then to be turned as usual through the boiling liquor, until the color appears to have acquired sufficient intensity. One pound of clean powdered chalk for every 100 pounds of stuff is then to be mixed with the dyeing bath, and the operation continued for eight or ten minutes longer, for the purpose of raising and brightening the color.

210. To communicate a beautiful orange yellow to woollen stuffs, ten pounds of quercitron bark, tied up in a bag, for every hundred pounds of stuff, are to be put into the bath with hot water. At the end of six or eight minutes, an equal weight of murio-sulphate of tin is to be added, and the mixture well stirred for two or three minutes. The cloth, previously scoured, and thoroughly wetted, is then immersed in the dyeing liquor, and quickly turned for a few minutes. By this process the coloring matter fixes on the cloth so effectually, that, after the liquor begins to boil, the highest yellow may be produced in less than fifteen minutes.

211. High shades of yellow, similar to those obtained from quercitron bark by the above process, are frequently given with young fustic and dyers' spirit; but this color is much less beautiful and permanent, while it is more expensive than what is obtained from the bark.

212. A fine bright, or golden yellow is obtained by employing ten pounds of quercitron bark, for each 100 pounds of cloth, the bark being first boiled a few minutes, and then adding seven or eight pounds of murio-sulphate of tin, with about five pounds of alum. The cloth is to be dyed in the same manner as in the process for the orange-yellow. Bright yellows of less body are produced by employing a smaller proportion of bark, as well as by diminishing the quantity of murio-sulphate of tin and alum. And indeed every variety of shade of pure bright yellow may be given by varying the proportions of the ingredients.

213. The lively delicate green shades, so much admired, are produced by the addition of tartar, with the other ingredients. The tartar must be added in different proportions, according to the shade which is wanted. For a full bright yellow, delicately inclining to green, it will be proper to employ eight pounds of bark, six of murio-sulphate of tin, with six of alum, and four of tartar. An additional proportion of alum and tartar renders the yellow more delicate, and inclines it more to the green shade; but when this lively green shade is wanted in the greatest perfection, the ingredients must be used in equal proportions. The delicate green lemon yellows are seldom required to have much fulness or body. Ten pounds of bark, with an equal quantity of the other ingredients, are sufficient to dye 300 or 400 pounds of stuffs.

214. *Of Dyeing Silk Yellow.*—Weld is seldom employed to give a yellow dye to silk, but when this is desired, the process differs a little from the former. The silk being scoured, alumed, and rinsed in the manner usual for dyeing bright colors, a bath is prepared, by boiling weld in water, in the proportion of double the weight of the silk for a quarter of an hour, and straining off the liquor into a vat, where it is suffered to cool till the hand can be held in it. Then the silk is dipped and turned, till the color is found uniform. While this is going on, the old weld is boiled with a fresh quantity of water, and, after the silk has been dipped, one half of the exhausted bath is taken out, and the vat filled up with the second decoction. The temperature of the fresh bath may be a little higher than that of the former, but should not be too great, lest the color already fixed be dissolved. The stuff is to be turned as before, and then taken out of the bath. Some soda is to be dissolved in a part of the second decoction, and a larger or smaller quantity of the solution is to be added to the bath, according to the intensity of the shade wanted. The color is examined by taking out a skein, and wringing it.

215. To produce shades having more of a gold color, anotta is added in proportion to the depth of color required. Lighter shades, such as pale lemon color, are obtained by previously whitening the silk, and regulating the proportion of the ingredients of the bath by the shade required. To give a yellow, with a green tinge, a little indigo is added to the bath, if the silk has not been previously azured; to prevent the greenish shade being too deep, the silk should be more slightly alumed than usual.

216. Dr. Bancroft informs us that all the shades of yellow can be given at a cheaper rate by quercitron bark than by weld. To dye with this bark, a quantity of it powdered, and enclosed in a bag, in proportion to the shade wanted, from one to two pounds for every pound of silk, is put into the vat while the water is cold. Heat is applied, and when the bath is rather more than blood-warm, or of the temperature 100°, the silk, after being first alumed, is immersed and dyed in the usual way. A deeper shade may be given by adding a small quantity of chalk or pearl-ashes towards the end of the operation. To produce a more lively yellow, a small portion of murio-sulphate of tin may be employed, but it should be used cautiously, as it is apt to diminish the lustre of the silk.

217. To dye silk of an aurora or orange color, after having been properly scoured, it may be immersed in an alkaline solution of anotta, the strength of which is to be regulated by the shade required. The temperature of the bath should be between that of tepid and boiling water. When the desired shade is obtained, the silk is to be twice washed and beetled, to free it from the superfluous coloring matter, which would injure the beauty of the color. When raw silk is to be dyed, that which is naturally white should be selected, and the bath should be nearly cold; for otherwise the alkali, by dissolving the gum of the silk, destroys its elasticity. Silk is dyed of an orange color by anotta, but if a redder shade be wanted, it is procured by alum, vinegar, or lemon juice. These colors are beautiful, but do not possess permanency.

218. *Of Dyeing Cotton and Linen Yellow.*—The process commonly observed in dyeing cotton and linen yellow, is by scouring it in a bath prepared in a lie with the ashes of green wood. It is afterwards washed, dried, and alumed, with

one-fourth of its weight of alum. After remaining in twenty-four hours, it is taken out of the aluming and dried, but not washed. The cotton is then dyed in a weld bath, in the proportion of one pound and a quarter of weld for each pound of cotton, and turned in the bath till it has acquired the desired color.

219. After being taken out of the bath, it is soaked for an hour and a half in a solution of sulphate of copper, in the proportion of one-fourth of the weight of the cotton, and then immersed, without washing, for nearly an hour, in a boiling solution of white soap, after which it is well washed and dried.

220. A deeper yellow is communicated to cotton, by omitting the process of aluming, and employing two pounds and a half of weld for each pound of cotton. To this is added a dram of verdigris, mixed with part of the bath. The cotton is then to be dipped and worked till the color become uniform. It is then taken out of the bath, and a little solution of soda added, after which it is returned, and kept for fifteen minutes. It is then wrung out and dried.

221. Other shades of yellow may be obtained by varying the proportion of ingredients. Thus, a lemon color is dyed by using only one pound of weld for every pound of cotton, and by diminishing the proportion of verdigris, or using alum as a substitute.

222. Dr. Bancroft recommends a superior process, and less expensive. He also objects to the use of salts of copper, as deepening the yellow. One pound of acetate of lead, and three pounds of alum, are to be dissolved in a sufficient quantity of warm water. The cotton or linen, after being properly rinsed, is to be soaked in this mixture, heated to the temperature of 100°, for two hours. It is then taken out, moderately pressed over a vessel, to prevent the waste of the aluminous liquor. It is then dried in a stove heat, and, after being again soaked in the aluminous solution, it is wrung out and dried a second time. Without being rinsed, it is to be barely wetted with lime water, and afterwards dried; and if a full, bright, and durable yellow is wanted, it may be necessary to soak the stuff in the diluted aluminous mordant, and, after drying, to wet it a second time in the lime water. After it has been soaked for the last time, it should be well rinsed in clean water, to separate the loose particles of the mordant, which might injure the application of the coloring matter. By the use of the lime-water, a greater proportion of alumina combines with the stuff, besides the addition of a certain proportion of lime.

223. In the preparation of the dyeing bath, from twelve to eighteen pounds of powdered quercitron bark are enclosed in a bag, for every 100 pounds of stuff, varying the proportion according to the depth of shade required. The bark is put into the water while it is cold; and, immediately after, the stuff is immersed and turned for an hour, or an hour and a half, during which the water should be gradually heated, and the temperature raised to about 120.° At the end of this time the heat is increased, and the dyeing liquor brought to a boiling temperature; but at this temperature the stuff must remain in it only for a few minutes. It is then taken out, rinsed, and dried.

224. Dr. Bancroft remarks, that, when the aluminous mordant is employed without the addition of water, one soaking only, and an immersion in lime water, may be sufficient; but he is of opinion that greater advantage is derived from the application of a more diluted mordant at two different times, or even by a more frequent immersion of the stuff alternately in the aluminous mordant, and lime water, and drying it after each immersion. By this treatment he found that the color always acquired more body and durability.

225. Chaptal proposes a process for communicating to cotton a nankeen yellow, which, while it affords a durable color, has the advantage of being cheap and simple. When cotton is immersed in a solution of any salt of iron, it has so strong an affinity for the oxide, that it decomposes the salt, combines with the iron, and assumes a yellow color. The process recommended by Chaptal is this:—The cotton to be dyed is put into a cold solution of sulphate of iron, of the specific gravity of 1·02. It is afterwards wrung out, and immediately immersed in a lie of potassa of the specific gravity of 1·01. This lie must previously have been saturated with a solution of alum. When the stuff has been kept for four or five hours in this bath, it may be taken out, washed, and dried. By varying the proportion of sulphate of iron, every variety of shade may be obtained.

226. The following curious process for dyeing linen of a durable yellow, as practised in the east, is given in the Encyclopædia Britannica. The object of this process, which is tedious, is to increase the affinity between the alumina and the stuff, so that it may adhere with sufficient force to produce a permanent color. For this purpose three mordants are employed: these are oil, tan, and alum. The cotton is soaked in a bath of oil, mixed with a weak solution of soda. Animal oil, as it is found to answer best, is preferred. Glue has also been tried, and is found to answer very well. The soda must be in the caustic state, as it then combines with the oil, and produces on the cloth an equal absorption. The stuff is then to be washed, and afterwards put into an infusion of nut-galls of the white kind; the infusion should be used hot. The tan combines with the oil, while the gallic acid carries off any alkali which may adhere to the cloth. When the stuff is removed from the bath, it should be quickly dried; too great an excess of galls beyond a proper proportion with the oil should be avoided, as it is apt to darken the color. After this preparation the stuff is to be immersed in a solution of alum; and, in consequence of the affinity which exists between tan and alumina, the alum is decomposed, and its earth combines with the tan

Of Dyeing Brown.

227. The substances employed in dyeing browns are very numerous, but those chiefly used are sumach, walnut-peels, and walnut-roots.

On separating the bark from the ligneous substance of the walnut-root, says Berthollet, in relating some experiments on the subject, the former

yielded in equal weight a liquor much more charged with color. The bark of the wood of walnut also exhibited properties approaching to those of walnut-peels, but its decoction formed a blackish precipitate with sulphate of iron.

Walnut-peels exercise a lively action on oxide of iron, dissolving it, and forming a liquor as black as ink. If boiled along with clean filings they do not attack them; but, if left exposed to the air, the liquor becomes soon black.

The coloring matter of walnut-peels has a great disposition to combine with wool. It gives it a very durable walnut or dun color, and mordants appear to add little to its permanence, but they may vary its shades, and give them more lustre. By preparing the stuff with alum, a richer and livelier color may be obtained.

Walnut-peels are of excellent use, because they give agreeable and very durable shades, and, being employed without any mordant, they preserve the softness of the wool, and require but one simple, and not expensive, operation. Walnut-peels are gathered when the nuts are entirely ripe. Large casks or tubs are filled with them, and a sufficiency of water is poured on them to cover their surface. In this state they may be kept a year and upwards. At the Gobelins, where a very extensive and varied use is made of this ingredient, it is kept for two years before it is employed. It is found then to furnish much more color. It has a very unpleasant putrid odor.

The peels may also be used which are taken from the nuts before they are ripe; but they do not keep so long.

228. The following are the results of M. Berthollet's experiments on sumach (rhus coriaria):—

The infusion of sumach is of a dun color, bordering on green. It speedily becomes green in the air. When it is recent, the solution of potassa produces little change on it. The acids clear up its color, and render it yellow. Solution of alum makes it turbid, producing a scanty yellow precipitate, while the liquor remains yellow.

Acetate of lead forms instantly an abundant yellowish precipitate, which takes a brown color on its surface; the liquor remains of a clear yellow.

Sulphate of copper affords a copious yellowish-green precipitate, which, after some hours, changes to a brown-green. The liquor remained clear, and a little yellow.

Sulphate of zinc of commerce rendered the liquor turbid, blackening it, and forming a deep blue precipitate.

Pure sulphate of zinc deepened the color much less; only a slight dun deposite, verging on brown, took place.

Muriate of soda produced no sensible change at first; but, after some hours, the liquor was a little turbid, and its color had become somewhat clearer.

Sumach acts like nut-galls on solution of silver, whose metal it reduces; a result promoted by the action of light. We have already dwelt at sufficient length on the explanation of this phenomenon, as well as the general properties of astringents. Sumach affords of itself a fawn-color bordering on green; but it communicates to cotton stuffs several very permanent colors, when they are combined with mordants.

229. Sanders, or sandal-wood, is also employed for the purpose of giving a fawn-color. There are three kinds of this wood, the white, the yellow, and the red. The last only, which is a compact heavy wood, brought from the Coromandel coast, is used in dyeing. By exposure to the air it becomes of a brown color; when employed in dyeing, it is reduced to fine powder, and it yields a fawn-color with a brownish shade, inclining to red.

The quantity of coloring matter, however, which it yields of itself is small, and it is said that it gives harshness to woollen stuffs. When it is mixed with other substances, as sumach, walnut-peels, or galls, the quantity of coloring matter is increased; it gives a more durable color, and produces considerable modifications in the coloring matter with which it is mixed. Sandal-wood yields its coloring matter to brandy, or diluted alcohol, more readily than to water.

230. Soot communicates to woollen stuffs a fawn or brown color, of a lighter or deeper shade, in proportion to the quantity employed; but the color is fading, and its affinity for wool is not great; and, besides leaving a disagreeable smell, it renders the fibres harsh. In some manufactories, it is employed for browning certain colors, and it produces shades which could not otherwise be readily obtained.

231. In dyeing with walnut-peels, a quantity proportioned to the quantity of stuff, and the intensity of shade wanted, is boiled for fifteen minutes in a copper. All that is necessary in dyeing with this substance is, to moisten the cloth or yarn with warm water, previously to their immersion in the copper, in which they are to be carefully stirred till they have acquired the proper shade. This is the process, if the aluminous mordant be not employed. In dyeing cloth, it is usual to give the deepest shades first, and the lighter ones afterwards; but, in dyeing woollen yarn, the light shades are given first, and the deeper ones afterwards. A fresh quantity of peels is added each time.

232. Berthollet made a number of experiments to ascertain the difference of color obtained from the simple decoction of walnut-peels, and the addition of metallic oxides as mordants. The oxide of tin, he informs us, yielded a clearer and brighter fawn-color than that of the simple decoction. The oxide of zinc produced a still clearer color, inclining to ash or gray. The color from oxide of lead had an orange cast, while that from oxide of iron was of a greenish brown.

233. A fawn-color, which has a shade of green, is obtained from sumach alone; but to cotton stuffs, which have been impregnated with printers' mordant, or acetate of alumina, sumach communicates a good and durable yellow.

234. Vogler employed the tincture of sanders-wood for dyeing patterns of wool, silk, cotton, and linen, having previously impregnated them with a solution of tin, and afterwards washing and drying them. Sometimes he used the solution unmixed, and at other times added six or ten parts of water, and in whatever way he em-

ployed it, he obtained a poppy color. When the mordant employed was solution of alum, the color was a rich scarlet; with sulphate of copper it was a clear crimson, and with sulphate of iron a beautiful deep violet.

Of Dyeing Compound Colors.

235. On this branch of dyeing, M. Berthollet remarks, that simple colors form, by their mixture, compound colors; and if the effects of the coloring particles did not vary, according to the combinations which they form, and the actions exercised on them by the different substances present in a dyeing bath, we might determine with precision the shade that ought to result from the mixture of two other colors, or of the ingredients which afford these colors separately: but the chemical action of the mordants, and of the liquor of the dye bath, often changes the results; theory, however, may always predict these effects to a certain degree.

It is not the color peculiar to the coloring matters which is to be considered as the constituent part of compound colors, but that which they must assume with a certain mordant, and in a certain dye bath. Hence, our attention ought to be principally fixed on the effects of the chemical agents employed.

It is in this department of dyeing that the intelligence of the operator may be most useful, by enabling him to vary his processes, and to arrive at the proposed end by the simplest, shortest, and least expensive way.

The processes for compound colors are very numerous. We shall mention only those which most merit attention, and shall establish the principles on which they ought to be conducted by particular examples.

236. *Of Dyeing Wool Green.*—Green is obtained by the mixture of yellow and blue; and it is distinguished into many different shades; but it requires experience to obtain this color uniform and without spots, especially in the light shades. It is possible to produce green by beginning either with the yellow or the blue dye; but the first method is attended with some inconveniences; for the blue soils the linen, and a part of the yellow being dissolved in the vat, changes and makes it green; the second method is, therefore, preferable. It is common to employ the pastel vat, but for some kinds of green, solution of indigo in the sulphuric acid is used; and then the blue and yellow are either dyed separately, or all the ingredients are mixed together, to dye by a single operation.

237. Solutions of copper with yellow substances may also be employed. The blue ground must be proportioned to the green which is desired; thus, for the green like that of a drake's neck, a ground of deep royal blue is given; for parrot green, a ground of sky-blue; for verd naissant, a ground of white-blue is necessary. After the cloths have received the proper ground, they are washed in the fulling-mill, and boiled as for common welding, but for the lighter shades the proportion of salts is diminished. Most commonly the cloths intended for the light shades are boiled first; and, when these are taken out tartar and alum are added.

238. The process of welding is conducted in the same manner as for yellow; but a larger quantity of weld is employed, except for the lighter shades, which, on the contrary, require a still smaller proportion. For the most part, a succession of shades from the deepest to the lightest is dyed at the same time, beginning with the deepest and proceeding to the lightest; between each dip, which lasts half an hour, or three quarters, water is added to the bath. Some dyers give each parcel two dips, beginning the first time with the deep shades, and the second with the light ones; in that case, each parcel should remain a shorter time in the bath: for the very light shades, care should be taken that the bath does not boil. A browning with logwood and a little sulphate of iron is given to the very deep greens.

The green obtained by means of the solution of indigo in sulphuric acid, is denominated Saxon green, from its having been first practised in Saxony. We shall here give the process directed by Dr. Bancroft for this color.

239. The most beautiful Saxon greens may be produced very cheaply and expeditiously, by combining the lively yellow which results from quercitron bark, murio-sulphate of tin, and alum, with the blue afforded by indigo dissolved in sulphuric acid, as for dyeing the Saxon blue.

To produce this combination most advantageously, the dyer, for a full-bodied green, should put into the vessel after the rate of six or eight pounds of powdered bark in a bag, for every hundred pounds of cloth, with only a small proportion of water as soon as it begins to grow warm; and when it begins to boil, he should add about six pounds of murio-sulphate of tin, with the usual precautions, and a few minutes after about four pounds of alum. These having boiled together five or six minutes, cold water should be added, so as to bring the heat of the liquor down to what the hand is able to bear. Immediately after this, as much sulphate of indigo is to be added, as will suffice to produce the shade of green intended to be dyed, taking care to mix it thoroughly with the first solution by stirring, &c.; and this being done, the cloth, being previously scoured and moistened, should be expeditiously put into the liquor, and turned very briskly through it for a quarter of an hour, in order that the color may apply itself equally to every part, which it will certainly do in this way with proper care. By these means, very full, even, and beautiful greens may generally be dyed in half an hour; and, during this space, it is best to keep the liquor at rather less than a boiling heat. Murio-sulphate of tin is greatly preferable for this use to the dyers' spirit; because the latter consists chiefly of nitric acid, which, by its highly injurious action upon indigo, would render that part of the green color very fugitive. But no such effect can result from the murio-sulphate of tin, since the muriatic acid has no action upon indigo; and the sulphuric is that very acid which alone is proper to dissolve it for this use.

Respecting the beauty of the color thus produced, those who are acquainted with the unequalled lustre and brightness of the quercitron yellows, dyed with the tin basis, must necessarily

conclude, that the greens composed therewith, will prove greatly superior to any which can result from the dull muddy yellow of old fustic; and, in point of expense, it is certain that the bark, murio-sulphate of tin, and alum, necessary to dye a given quantity of cloth in this way, will cost less than the much greater quantity (six or eight times more) of fustic, with the alum necessary for dyeing it in the common way, the sulphate of indigo being the same in both cases. But in dyeing with the bark, the vessel is only to be filled and heated once; and the cloth, without any previous preparation, may be completely dyed in half an hour; whilst in the common way of producing Saxon greens, the copper is to be twice filled; and to this must be joined the fuel and labor of an hour and a half's boiling and turning the cloth, in the course of preparation, besides nearly as much boiling in another vessel to extract the color of the fustic; and after all, the dyeing process remains to be performed, which will be equal in time and trouble to the whole of the process for producing a Saxon green with the bark; so that this color obtained from bark will not only prove superior in beauty, but in cheapness, to that dyed with old fustic.

240.—*Of Dyeing Silk Green.*—In communicating to silk the green color, it requires very great caution to prevent the stuff from being spotted and striped. Silk intended for greens is boiled as for the ordinary colors; for light shades, however, it should be boiled thoroughly as for blue.

Silk is not first dyed blue like cloth; but, after a strong aluming, it is washed slightly in the river, and distributed into small hanks, that it may take the dye equably; after which it is turned carefully round the sticks, through a bath of weld. When it is thought that the ground is sufficiently deep, a pattern is tried in the vat, to see if the color has the wished-for tone; if it has not ground enough, decoction of weld is added; and, when it is ascertained that the yellow has reached the proper degree, the silk is withdrawn from the bath, and passed through the vat as for blue.

To render the color deeper, and at the same time to vary its tone, there are added to the yellow bath, when the weld has been taken out, juice of Brasil-wood, decoction of fustet, and anotta. For the very light shades, such as apple-green and celadon-green, a much weaker ground is given than for the other colors. For the light shades, if not for sea-green, it is preferable to dye yellow in baths which have already been used, but in which there is no Brasil-wood or fustet, because the silk, perfectly alumed, dyes too rapidly in fresh baths, and is thence subject to take an uneven color. Dr. Bancroft recommends the following process for producing Saxon green at one operation, as the most commodious and certain:—

241. A bath is prepared of four pounds of quercitron bark, three pounds of alum, and two pounds of murio-sulphate of tin, with a sufficient quantity of water. The bath is boiled ten or fifteen minutes, and when the liquor is in temperature till the hand can bear it, it is fit for dyeing. By adding different proportions of sulphate of indigo, various and beautiful shades of green may be obtained, and the color thus produced is both cheap and uniform. Care should be taken to keep the bath constantly stirred, to prevent the coloring matter from subsiding. Those shades which are intended to incline most to the yellow, should be dyed first; and, by adding sulphate of indigo, the green, having a shade of blue, may be obtained.

242. To produce what is called an English green, and which is more beautiful than the ordinary greens, and more durable than Saxon green, Guhliche recommends the following process:—He gives the silk, first of all, a clear blue in the cold vat; he steeps it in hot water; washes it in running water; passes it through a weak solution of alum; prepares a bath with the sulphuric solution of indigo, a little of the solution of tin, and a tincture of Avignon berry, made with a vegetable acid. He keeps the silk in this bath till it has assumed the wished-for shade; he then washes and dries in the shade. The lighter hues may be dyed in the sequel. The shades may be varied with more or less blue, or more or less yellow, by the proportions of the indigo solution, and of the yellow substance. When it is wished to give a goslin-green to silk, a light blue is communicated to it, either in the hot vat or in the cold; it is passed through hot water, washed in running water, and while moist it is passed through a bath of anotta.

243. *Of Dyeing Cotton and Linen Green.*—To give a green color to linen and cotton yarns, it is proper to begin with scouring them well; then they must be dyed in the blue vat, cleansed in water, and passed through the weld process.

The strength of the blue and the yellow is proportioned to the color that is wanted. As it is difficult to give uniformity to the cotton velvets in the ordinary blue vat, they are usually dyed yellow with turmeric, and the green is produced with solution of indigo in sulphuric acid.

244. To dye beautiful greens upon cotton, Chaptal recommends that it be first dyed of sky-blue color with indigo, dissolved by potassa and orpiment, then macerated in a strong solution of sumach, then dried and soaked in a solution of acetate of alumina, dried again, rinsed, and finally dyed with quercitron bark, in the proportion of twelve pounds to every fifty pounds of cotton. The quercitron is preferred to weld for this purpose, because the color of the former combines better with that of sumach.

245. M. D'Apligny recommends a method of dyeing cotton and linen of a fine sea or apple-green by means of a single bath; it is in substance as follows:—The liquor is prepared by mixing verdigris with a sufficient quantity of vinegar, and keeping the mixture in a bottle well stopped for fifteen days in the heat of a stove, and adding to it, about four hours before using it, a solution of potassa equal in weight to that of the verdigris, keeping it still hot. The cotton goods are first soaked in a warm solution, made by dissolving one ounce of alum in five quarts of water for every pound of cotton. The goods are again taken out, and, after adding the verdigris mixture, they are returned, and passed through the bath till sufficiently dyed.

Linen is dyed of the shades of olive and drake's neck green, by first giving it a blue ground, then galling and dipping it in a bath of acetate of iron; afterwards passing it through a bath of weld, combined with verdigris; and through another containing sulphate of copper, finally brightening the color by immersion in a solution of soap.

246. The green, says M. Berthollet, obtained by giving a yellow color to a stuff which has been previously dyed blue, and afterwards washed, presents nothing obscure. The color inclines more or less to yellow, or to blue, according to the tint of blue given, and the strength of the yellow bath. The intensity of the yellow is increased by alkalis, by sulphate of lime, by ammoniacal salts. It is diminished by acids, alum, and solution of tin. The shades vary likewise from the nature of the yellow substance employed.

These different effects will be obtained with the same ingredients in the formation of the Saxon green, according to the process adopted. If the Saxon blue be first dyed, and the yellow color be next given separately, the effects will be analogous to those just mentioned. But if solution of indigo be mixed with the yellow ingredients, the results are not the same, because the sulphuric acid acts in this case on the coloring particles, impairing the intensity of the yellow. If a succession of shades be dyed in a bath composed of yellow and the solution of indigo, the last approach more and more to yellow, because the particles of indigo become attached to the stuff in preference to the yellow ones, which therefore become predominant in the bath.

Of Dyeing Violet Color, &c.

247. *Of Dyeing Wool Violet, &c.*—From the mixture of red and blue are obtained violet, purple (columbine), dove-color, pansy, amaranth, lilac, mallow, and a great many other shades, determined by the nature of the substances, whose red color is combined with a blue color, of which one becomes more or less predominant over the other, according to the proportions of the ingredients, and the other circumstances of the process. Hellot observes, that stuff which has been dyed scarlet, takes an unequal color when blue is to be united with it. The blue is therefore given first, which, even for violet and purple, ought not to be deeper than the shade distinguished by the name of sky-blue; a boiling is given with alum mixed with two-fifths of tartar; the stuff is then dipped in a bath composed of nearly two-thirds as much cochineal as for scarlet, to which tartar is always added.

248. The circumstance which distinguishes the process for purple from that for violet, is that for the former a lighter blue ground is given, and a larger proportion of cochineal is employed. These colors are frequently dyed after the reddening for scarlet, such quantities of cochineal and tartar being added as are necessary; the operation is managed in the same way as for scarlet. But lilacs, pigeon's necks, &c., are commonly dipped in the boiling, which has served for violet, after alum and tartar have been added to it: the blue ground having been proportioned to the shade required, the quantity of cochineal is also adjusted in a similar manner; a little solution of tin is added for some reddish shades, such as peach blossom. It is to be observed, that, though the quantity of cochineal is diminished according to the lightness of the shade required, the quantity of tartar is not lessened, so that the proportion of it, compared with that of the cochineal, is so much the greater, as the color required is lighter.

249. M. Poerner is of opinion, that, to procure the colors composed of red and blue, it is advantageous to employ the solution of indigo in sulphuric acid, because a great variety of shades is thus more easily obtained, and the process is not so long or expensive. But the colors thereby obtained are less durable than when the blue vat is employed. He says, however, that they have sufficient permanence, if a solution of indigo be used to which some alkali has been added.

The effects may be easily varied, by giving a preparation to the stuff with different proportions of alum and tartar, or with solution of tin; and by dyeing with different proportions of cochineal and solution of indigo.

250. A process for dyeing wool of a purple color is given by M. Berthollet, as having been communicated to him by Descroizilles. It is this:—If it be wool in the fleece which is to be dyed, one-third of its weight of mordant is required; if it be a woven stuff, only a fifth is necessary. A bath is prepared at a temperature which the hand can bear; the mordant is well mixed with it; and the wool or stuff is then immersed. It is to be properly agitated, and the same degree of heat is to be kept up for two hours, which may be even increased a little towards the end. It is then lifted out, aired, and very well washed. A new bath of pure water at the same heat is prepared; a sufficient quantity of violet wood is added to it; the stuff is then let down, and agitated; and the heat is urged to the boiling point, at which it is maintained for a quarter of an hour. The stuff is then lifted out, aired, and carefully rinsed. The dye is now completed. If a decoction of one pound of logwood has been used for three pounds of wool, and proportionately for the stuffs which require a smaller dose, a beautiful violet is obtained, to which a sufficient quantity of Brasil-wood gives the shade known by the name of prune de monsieur.

251. The ingenious author from whom we quote the above, thus endeavours to explain the process:—

If we may venture an opinion, without having made direct experiments on a complicated process, such as that communicated by Descroizilles, and which is still employed advantageously in some manufactories with modifications which we do not know, we would suggest the following explanation.

The muriate of soda is decomposed by the sulphuric acid, and the muriatic acid set at liberty dissolves the tin.

A portion of the tin is precipitated by the tartaric acid, whence the deposite is occasioned. But a portion which remains in solution serves to modify the effect, as we have seen with regard

to cochineal. The oxide of copper, present in this preparation, forms blue with the coloring particles of the indigo; the oxide of tin with the same wood gives violet, and red with the coloring matter of Brasil-wood.

252. *Of Dyeing Silk Violet, &c.*—There are two kinds of violet colors given to silk, these are, by the French writers on dyeing, distinguished into the fine and the false. The fine violet may be given by dyeing the silk with cochineal, and afterwards passing it through the indigo vat. The preparation and dyeing of the silk with cochineal are the same as for crimson, with the omission of tartar and solution of tin, by means of which the color is heightened. The quantity of cochineal made use of is always proportioned to the required shade; but the usual proportion for a fine violet color is two ounces of cochineal for every pound of silk. When the silk is dyed, it is washed at the river, twice beetled, dipped in a vat of a strength proportioned to the depth of the violet shade, and then washed and dried with precautions similar to those which all colors require that are dyed in a vat. If the violet is to have greater strength and beauty, it is usual to pass it through the archil bath, a practice which, though frequently abused, is not to be dispensed with for light shades, which would otherwise be too dull.

253. When silk has been dyed with cochineal, as above directed, a very light shade of blue must be given it for purple. Only the deepest shades are passed through a weak vat. For those which are less so, cold water is had recourse to, into which a little of the blue vat is put, because they would take too much blue in the vat itself, however weak it may be. The light shades of this color, such as pink, gridelin, and peach-blossom, are made in the same manner, with a diminution of the proportion of cochineal.

254. The spurious violets are given to silk in various ways. The most beautiful, and those most in use, are prepared with archil. The strength of the archil bath is proportioned to the color wished for: the silk, to which a beetling in the river has been given on its coming out of the soap, is turned through it round the skein sticks. When the color is thought to be deep enough, a trial is made on a pattern in the vat, to see if it takes the violet that is wanted. If it is found to be at the proper pitch, a beetling is given to the silk at the river, and it is passed through the vat as for fine violets. Less blue, or less archil, is given, according as the violet is wished to incline to red or to blue.

255. A violet color may be imparted to silks by immersing them in water impregnated with verdigris, as a substitute for aluming, and then giving them a bath of logwood, in which they assume a blue color; which is converted into a violet, either by dipping them in a weaker or stronger solution of alum, or by adding it to the bath; the alum imparts a red shade to the coloring matter of the logwood. This violet possesses but little beauty, or permanence, but if the alumed silk be immersed in a bath of Brasil-wood, and next in a bath of archil after washing it at the river, a color is obtained possessing a much higher degree of beauty and intensity. M. Decroizilles' process, above related, for dyeing wool, was found to succeed equally well, according to his account, in communicating a violet color to silk.

256. *Of Dyeing Cotton and Linen Violet, &c.*—The process in most common use for dyeing cotton and linen of the violet colors is the following:—The stuffs have first a blue ground communicated to them in the indigo vats according to the shade required; they are then dried. After this they must be galled in the proportion of three ounces of galls to a pound: they are left for twelve or fifteen hours in the gall bath, after which, they are wrung and dried again. They are then passed through a decoction of logwood, and when well soaked are taken out, and two drachms of alum, and one of dissolved verdigris, for each pound of stuff are added to the bath; the skeins are then redipped on the sticks, and turned for a full quarter of an hour, when they are taken out to be aired; after which they are again completely immersed in the bath for a quarter of an hour, then taken out and wrung. The vat which has been employed is then emptied; half of the decoction of logwood which had been reserved is poured in; two drachms of alum are added, and the stuff dipped afresh, until it is brought to the shade required. The decoction of logwood ought to be stronger or weaker according to the shade required; this violet stands the action of the air tolerably well, but is not so durable as that obtained by madder.

257. Permanent purple and violet colors may be given to cotton stuffs that have been dyed a Turkey-red, by adding to the alum steep a proportion of sulphate of iron suited to the shade required. Cotton also that has been dyed a light blue with indigo, may be changed to purple or violet by passing the stuff through a bath prepared with the aluminous mordant, and dyeing with madder.

Of Dyeing Orange.

258. *Of Dyeing Wool Orange.*—Orange colors are produced by the mixture of red and yellow; and, by varying the proportions of the ingredients, an almost endless variety of shades may be obtained.

Poerner describes a great many varieties which he obtained by employing weld, saw-wort, dyers' broom, and some other yellow substances; as also by introducing into the preparation of the cloth, or into the bath, tartar, alum, sulphate of zinc, or sulphate of copper.

Different colors may in like manner be procured from the madder, which is associated with yellow substances. It is thus that the mordores and the cinnamons are dyed; colors commonly formed in two baths. The maddering is first given, preceded by a bath of alum and tartar as for ordinary maddering; and then a bath of weld is employed.

For cinnamon a weaker maddering is given, and commonly a bath is used which had served for the mordore. The proportions are varied according as the red or the yellow is wished to predominate. Sometimes nut-galls are added, and sometimes the color is deepened by a browning.

Occasionally the sole object is to give a reddish tone to the yellow; the stuff just dyed yellow may, in this case, be passed through a bath of madder, more or less charged according to the intention.

Brasil-wood is likewise employed along with the yellow substances, and sometimes it is associated with cochineal and madder.

When, instead of weld or other yellow substances, root of walnut, walnut-peels, or sumach, are used, tobacco, snuff, chestnut, musk colors &c., are produced.

259. *Of Dyeing Silk Orange.*—Morrones, cinnamons, and all the intermediate shades are given to silk, by logwood, Brasil, and fustic · a bath is prepared by mixing decoctions of these three woods made separately; the proportion of each is varied according to the shade required, but that of fustic ought to prevail; the bath should be of a moderate temperature; and the silk, after being scoured and alumed in the usual manner, is immersed in it. The silk is turned on the skein sticks in the bath, and when taken out, if the color be uniform, it is wrung and dipped in a second bath of the three ingredients, the proportions of which are regulated according to the effect of the first bath, in order to obtain the shade required.

For some colors blue is united to red and yellow, it is thus olives are produced: a blue ground is first given, then the yellow dye, and lastly, a slight maddering. Olive may be dyed without using the blue vat, by dipping the silk in a very strong weld bath, after being first alumed; to this a decoction of logwood is afterwards added, and, when the silk is dipped, a little solution of alkali is put in, which turns it green, and gives the silk the olive color. The silk is repeatedly dipped in this bath until it has acquired the proper shade.

260. For the color termed russet olive, or rotten olive, fustet and logwood, without alkali, are added to the bath after the welding. If a more reddish color be wished for, only logwood is added. A kind of reddish olive is also made by dyeing the silk in a bath of fustet, to which more or less sulphate of iron and logwood are added.

261. *Of Dyeing Cotton and Linen Orange.*—The usual combinations of scarlet and orange, are produced with difficulty. On this head Dr. Bancroft remarks, that, as cochineal and the tin mordant cannot be advantageously employed to dye linen or cotton, it is necessary for these substances solely to rely on the aluminous mordant, and to select the red coloring matter from other dye stuffs, especially from madder, with which the yellow of weld, quercitron bark, or fustic may be combined in such proportions as may be sufficient for the required color. M. Berthollet gives some processes for colors, which he regards as mixtures of red and yellow, though some of them may more properly be considered browns or greens. The various shades of morrone are given to cotton, by first galling, and then dipping it in a bath of acetate of iron, formed by the pyroligneous acid, and afterwards in a bath of weld and verdigris, after which it is dyed with fustic, sometimes with the addition of soda and alum. It is then completely washed, passed through a strong madder bath; then dipped in a weak solution of sulphate of copper; and, lastly, passed through a bath containing soap.

262. The shades cinnamon and mordore are thus given: the stuffs are first dyed with verdigris and weld, then dipped in a solution of sulphate or acetate of iron, out of which they are wrung and dried. After this they are galled, allowing three ounces of galls to each pound of stuff, again dryed, alumed, and passed through a madder bath. They are then washed and immersed in a warm soap lie, through which they are turned till the color is sufficiently bright.

263. The shades of color usually denominated gray, have already been treated of, and the processes for dyeing them need not here be repeated.

264. Several highly respectable writers who have done great justice to the subject of dyeing have connected with their treatises on it a brief view of the process of calico printing: we should have followed their example in the present instance, had we not considered the subject, in its present highly improved state, as meriting a distinct notice, which will be found in another part of our work. See PRINTING, CALICO.

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DYER (John), the son of Robert Dyer, Esq. a Welsh solicitor, was born in 1700. He passed through Westminster school under the care of Dr. Friend, and was then called home to be instructed in his father's profession. His genius, however, led him a different way; for, besides his early taste for poetry, having a passion no less strong for design, he determined to make painting his profession. With this view, having studied awhile under his master, he became an itinerant painter in South Wales, and about 1727 printed Grongar Hill. He then made the tour of Italy, where, besides the usual study, he often spent whole days in the country about Rome and Florence, sketching those picturesque prospects with facility and spirit. Images from hence naturally transferred themselves into his poetical compositions: the principal beauties of The Ruins of

Rome are perhaps of this kind; and the various landscapes in The Fleece have been particularly admired. On his return to England he published The Ruins of Rome, 1740. As his turn of mind was rather serious, he was advised to enter into holy orders; and he found no difficulty in obtaining them. He was ordained by the bishop of Lincoln. About the same time he married a lady of Coleshill named Ensor, whose grandmother was a Shakspeare, descended from a brother of the great Shakspeare. His ecclesiastical provision was, for a long time, but slender. His first patron, Mr. Harper, gave him, in 1741, Calthorp in Leicestershire, of £80 a year, on which he lived ten years; and in April 1751 exchanged it for Belchford in Lincolnshire, of £95 which was given him by lord chancellor Hardwicke. His condition now began to mend. In 1752 Sir John Heathcote gave him Coningsby, of £140 a year; and in 1756, when he was LL.B. without any solicitation of his own, obtained for him from the chancellor, Kirkby on Bane, of £110. In 1757 he published the Fleece, his greatest poetical work; but a consumptive disorder, with which he had long struggled, carried him off in 1758. Mr. Dyer's character, as a writer, has been fixed by three poems, Grongar Hill, The Ruins of Rome, and The Fleece; wherein a poetical imagination, perfectly original, a natural simplicity connected with and often productive of the true sublime, and the warmest sentiments of benevolence and virtue, have been universally observed and admired. These pieces were published separately in his lifetime; but, after his death, they were collected and published in one volume 8vo. in 1761, with a short account of him prefixed.

Dyer (Sir James), an eminent English lawyer, chief judge of the court of common pleas in the reign of queen Elizabeth. He died in 1581, and, about twenty years after, was published his large collection of Reports, which have been highly esteemed for their succinctness and solidity. He also left other writings behind him relative to his profession.

DYNAMICS, from *δυναμις*, power, that branch of mechanics which has for its object the action of forces on solid bodies, when the result of that action is motion; and in which, since all motion occupies some portion of time, we introduce time into our investigations. See Mechanics.

DY'NASTY, *n. s.* *Δυναστεια.* Government; sovereignty.

Some account him fabulous, because he carries up the Egyptian *dynasties* before the flood, yea, and long before the creation. *Hale's Origin of Mankind.*

Greece was divided into several *dynasties*, which our author has enumerated under their respective princes. *Pope.*

I was detained repairing shattered thrones,
Marrying fools, restoring *dynasties*,
Avenging men upon their enemies,
And making them repent their own revenge.
Byron.

Dynasty; from *δυναστης*, Gr. a sovereign; among ancient historians, signifies a race or succession of kings of the same family. Such were the dynasties of Egypt. The Egyptians reckon thirty dynasties within the space of 36,525 years; but most chronologers look upon them as fabulous.

DYRRACHIUM, in ancient geography, a town on the coast of Illyricum, before called Epidamnum, or Epidamnus, changed by the Romans to Dyrrachium; a name taken from the peninsula on which it stood. It was originally built by the Corcyreans, and, according to Pliny, was a Roman colony. It is famous in history: its port answered to that of Brundusium, and the passage between them was very ready and expeditious. It was also a very celebrated mart for the people of the Adriatic; and the free admission of strangers contributed much to its increase.

DYSÆ, in the Saxon mythology, inferior goddesses, messengers of Woden, whose province it was to convey the souls of such as died in battle to his abode, called Valhalla, i. e. the hall of slaughter; where they were to drink with him and their other gods, cerevisia, a kind of malt liquor, in the skulls of their enemies. The Dysæ conveyed those who died a natural death to Hela, the goddess of hell, where they were tormented with hunger, thirst, and every kind of evil.

DYSART, a royal borough in a parish of the same name, on the north shore of the Frith of Forth, three miles east of Kinghorn, and eleven north of Edinburgh. Its charter was granted about the beginning of the sixteenth century, and it is mentioned, at that time, as one of the principal trading towns in Fife. Before the middle of the eighteenth century, however, its trade had greatly declined, and it only began to revive about 1756. The church is very ancient, and is said to have been built by the Picts. The harbour is good, and the trade considerable; employing about thirty-six vessels in the coal and foreign trade. So early as 1483 salt was manufactured here and exported to Holland. The ship-building also employs a considerable number of hands. Dysart has a weekly market, and fairs in May, June, August, and November.

DY'SCRASY, *n. s.* *Δυσκρασια.* An unequal mixture of elements in the blood or nervous juice; a distemperature, when some humor or quality abounds in the body.

In this pituitous *dyscrasy* of blood, we must vomit off the pituita, and purge upon intermissions. *Floyer on the Humours.*

DYS'ENTERY, *n. s.* Fr. *dysenterie*, from *δυσεντερία.* A looseness, wherein very ill humors flow off by stool, and are also sometimes attended with blood.

From an unusual inconstancy of the weather, and perpetual changes of the wind from east to west, proceed epidemical *dysenteries.* *Arbuthnot on Air.*

Dysentery, Dysenteria; from *δυς*, difficulty, and *εντερα*, the bowels. The flux. A genus of disease in the class pyrexiæ, and order profluvia of Cullen's Nosology. It is known by contagious pyrexia; tenesmus; mucous stools, sometimes mixed with blood, the natural fæces being retained or voided in small hard scybala, loss of appetite, and nausea. It occurs chiefly in summer and autumn, and is often occasioned by much moisture quickly succeeding intense heat, whereby the perspiration is suddenly checked; but the cause which most usually gives rise to it, is a

specific contagion; and when it once makes its appearance, it not unfrequently spreads with great rapidity. A peculiar disposition in the atmosphere seems often to predispose, or give rise to the dysentery, in which case it prevails epidemically. The disease, however, is much more prevalent in warm climates than in cold ones. When the symptoms produce great loss of strength, and are accompanied with a putrid tendency and a fætid involuntary discharge, the disease often terminates fatally in the course of a few days; but when they are more moderate, it is often protracted to a considerable length of time, and goes off at last by a gentle perspiration. When the disease is of long standing, and has become habitual, it seldom admits of an easy cure; and when it attacks a person laboring under an advanced stage of scurvy, or pulmonary consumption, or whose constitution has been much impaired by any other disorder, it is sure to prove fatal. See MEDICINE.

DYSOPIA; from δυς, bad, and ωψ, an eye. Depraved sight, requiring certain light, particular distance, or one position. A genus of disease in the class locales, and order dysæsthesiæ of Cullen, containing the five following species:—1. D. tenebrarum, requiring objects to be placed in a strong light. 2. D. luminis, in which objects are only discernible in a weak light. 3. D. dissitorum, in which distant objects are not perceived. 4. D. proximorum, in which objects when near are not perceived. 5. D. lateralis, in which objects are not seen, unless placed in an oblique position.

DYSPEPSIA, or DYSPEPSY, from δυς, bad, and πεπτω, to concoct. Indigestion. Dr. Cullen arranges this genus of disease in the class neuroses, and order adynamiæ. It chiefly arises in persons between thirty and forty years of age, who lead either a very sedentary or irregular life.

DY'SPHONY, *n. s.* Δυσφωνία. A difficulty in speaking, occasioned by an ill disposition of the organs.

DYSPNO'EA, *n. s.* Δυσπνοια. A difficulty of breathing; straitness of breath.

DYSURIA; from δυς, difficult, and ουρον urine. Difficulty and pain in discharging the urine. A genus of disease in the class locales, and order epischesis of Cullen, containing six species:—1. D. ardens, a sense of heat, without any manifest disorder of the bladder. 2. D spasmodia, from spasm. 3. D. compressionis, from mechanical compression of the neighbouring parts. 4. D. phlogistica, from violent inflammation. 5. D. calculosa, from stone in the bladder. 6. D. mucosa, from an abundant secretion of mucus.

DY'SURY, *n. s.* Δυσουρία. A difficulty in making urine.

It doth end in a dysentery, pains of the hæmorrhoids, inflammations of any of the lower parts, diabetes, a continual pissing, or a hot *dysury*, difficulty of making water. *Harvey.*

DYTISCUS, the water-beetle, in zoology, a genus of insects of the order of the coleoptera. The antennæ are slender and setaceous; the hind feet hairy, and formed for swimming. There are 147 species, distinguished by their antennæ, the color of the elytra, &c. The larvæ of the dytiscus are often met with in water. They are oblong, and have six scaly feet. Their body consists of eleven segments. The head is large, with four filiform antennæ, and a strong pair of jaws. The last segments of their body have rows of hairs on the sides; and the abdomen is terminated by two spines charged with the like hairs, forming a kind of plumes. These larvæ are frequently of a greenish variegated brown: they are lively, active, and extremely voracious: they devour and feed upon other water insects, and often tear and destroy each other. The perfect insect is little inferior to its larvæ in voraciousness, but it can only exercise its cruelty on the young larvæ; the perfect larvæ, like himself, being sheltered by the kind of scaly cuirass with which they are armed. This creature must be touched cautiously; for, besides its power of giving a severe gripe with its jaws, it has under the thorax a long sharp spine, which it will drive into the fingers by the effort it makes to move backwards. The eggs of the dytisci are rather large, and are inclosed in a kind of silky duskish cod, of a strong and thick texture, in form round, and terminated by a long slender tail, of the same substance. These cods are often found in the water, and from them are brought forth the eggs and larvæ of the dytisci. The strength of these cods serves the insect to defend their eggs from the voraciousness of several other aquatic insects, and even from that of their fellow dytisci. Many species of the perfect insect are common in stagnated waters, which they quit in the evening to fly about. They swim with incredible agility, using their hinder legs as oars. The elytra of the females are in general furrowed, and those of the males plain. When they first arrive at their perfect state, their elytra are almost transparent, and in many species of a beautiful dun color, mingled with shades of a greenish-brown. The best method of catching them is with a hand-net, or sieve; for they are so nimble, and exercise their defensive weapons so often, and with such painful success to those who endeavour to catch them, that they are very often obliged to let them escape; the easiest way to kill them, is to let them fall into boiling hot water, which instantly destroys them.

DYVOUR, or bare-man, in Scots law, a person who, being involved in debt, and unable to pay, to avoid imprisonment, makes cession of his effects in favor of his creditors; and does his devoir and duty to them, proclaiming himself bare-man and indigent, and becoming debt-bound to them of all he has. The word is used in the same sense as BANKRUPT: see that article.

DZIDZA, a town of Albania, situated on the declivity and top of a barren mountain. The Albanian Christians have a monastery and several churches here. The arable land in the neighbourhood is laid out in vineyards, and the situation being warm, very fine wine is produced, but there is a scarcity of fresh water. It is eighteen miles from Delvinaki.

E.

E, the fifth letter of the Hebrew, Phœnician, Syriac, Samaritan, Sanscrit, Greek, Latin, Armenian, Coptic, Georgian, German, Italian, Spanish, French, and English languages, is derived, say Ainsworth and Minsheu, from the Heb. ה, turned, and the small line fixed to the foot; but it seems more naturally deduced from the Phœnician ∃, altered by the Greeks to E? E has two sounds; long, as scēne, and short, as mĕn. It is the most frequent vowel in the English language; for it not only is used like the rest in the beginning or end of words, but has the peculiar quality of lengthening the foregoing vowel, as căn, cāne; măn, māne; găp, gāpe, &c. Yet it sometimes occurs final, where yet the foregoing vowel is not lengthened; as gŏne, knowlĕdge, ĕdge, gĭve. Anciently almost every word ended with *e*, as for can, canne; for year, yeare; for great, greate; for need, neede; for flock, flocke. It is probable that this *e* final had at first a soft sound, like the female *e* of the French; and that afterwards it was in poetry either mute or vocal, as the verse required, till at last it became universally silent. *Ea* has the sound of *e* long: the *e* is commonly lengthened rather by the immediate addition of *a* than by the apposition of *e* to the end of the word; as mĕn, mēan; sĕl, sēal; mĕt, mēat; nĕt, nēat.

EACH, *pron.* Goth. *eilih;* Sax. aelch; Dut. *elch;* Scot. *ilk;* Gr. εικα; from Heb. אִישׁ, aish, each.—Minsheu. Either of two; every one of a number; corresponding with other.

Woo to you farisees that tithen mynte and ruwe and *ech* eerbe; and leeuen doom and the charite of God: for it bihofte to do these thingis and not to leeue tho. *Wiclif. Luke* xi.

Let *each* esteem other better than themselves. *Phil.* ii. 3.

But wel I wote he lied right in dede;
Of cursing ought *eche* gilty man him drede,
For curse wol sle right as assoiling saveth,
And also ware him of a significavit.
Chaucer. Prol. to Cant. Tales.

'Tis said they eat *each* other. *Shakspeare. Macbeth.*

Now I feel by proof,
That fellowship in pain divides not smart,
Nor lightens ought *each* man's peculiar load.
Milton.

Wise Pluto said, the world with men was stored,
That succour *each* to other might afford. *Denham.*

Go, dear; *each* minute does new danger bring. *Dryden.*

Loveliest of women! heaven is in thy soul;
Beauty and virtue shine for ever round thee,
Bright'ning *each* other! Thou art all divine.
Addison's Cato.

They are in such small spheres as to repel *each* other; that is, they are applied to *each* other by such very small surfaces, that the attraction of the particles of *each* drop to its own centre is greater than its attraction to the surface of the drop in its vicinity. *Darwin.*

Whate'er of wonder Reynolds now may raise,
Raphael still boasts contemporary praise:
Each dazzling light and gaudies bloom subdued,
With undiminished awe his works are viewed.
Sheridan.

EACHARD (John), an eminent English divine, born in Suffolk about 1636. He was educated at Cambridge, and became fellow of Catherine Hall. In 1670 he published, without his name, a piece entitled The Grounds and Occasions of the Contempt of the Clergy and Religion enquired into. He blended considerable humor with his remarks, which gave rise to a long controversy. In 1675 he was chosen master of Catherine Hall upon the decease of Dr. John Lightfoot; and in 1676 was created D. D. by royal mandate. Besides the above work, he wrote some tracts on Mr. Hobbes's Notions. He died in 1697.

EACHARD (Laurence), an eminent English historian of the eighteenth century. He was educated in the university of Cambridge, and presented to the living of Welton and Elkington in Lincolnshire, where he spent above twenty years, and distinguished himself by his writings, especially his History of England, which was attacked by Dr. Calamy and by Mr. Oldmixon. His General Ecclesiastical History, from the Nativity of Christ to the first Establishment of Christianity by Human Laws, under the emperor Constantine the Great, has passed through several editions. He was installed archdeacon of Stowe and prebend of Lincoln in 1712. He died in 1730.

EAD (*æd. ed.*) in the compound, and *eadig* in the simple names, denote happiness or blessedness. Thus Eadward is a happy preserver; Eadulph, happy assistance; Eadgar, happy power; Eadwin, happy conqueror; which Macarius, Eupolemus, Fausta, Fortunatus, Felicianus, &c., do in some measure resemble. *Ead* may also in some cases be derived from the Sax. *eath*, which signifies, easy, gentle, mild.

EADMER, or EADMERUS, an ancient English historian, whose parentage and birth-place are not well known. Being a monk, in the cathedral of Canterbury, he became the bosom friend and companion of two archbishops, St. Anselm and Ralph. To the former he was appointed spiritual director by the pope. In 1120 he was sent for by king Alexander I. of Scotland, to be raised to the primacy of that kingdom; and having obtained leave of king Henry, and the archbishop of Canterbury, he departed for Scotland, where he was kindly received by the king; and on the third day after his arrival was elected bishop of St. Andrew's. But on the day after his election Eadmer told the king that he was determined to be consecrated by none but the archbishop of Canterbury. Alexander declaring that the see of Canterbury had no pre-eminency over that of St. Andrew's, Eadmer at length sent his pastoral ring to the king, and laid his pastoral staff on the high altar, whence he had taken it; and, abandoning his bishopric, returned to England. Some time after, however, he wrote a submissive letter to the king of Scotland, which was accompanied by an epistle to the same purpose from the archbishop; these letters, however, did not produce the desired effect. Eadmer is most worthy of our regard for

his historical works, particularly for his excellent history of the affairs of England in his own time, from A. D. 1066 to A. D. 1122; in which he has inserted many original papers, and preserved important facts, nowhere else to be found. This work has been highly commended, both by ancient and modern writers, for its authenticity, as well as regularity of composition and purity of style. It is indeed more free from legendary tales than any other work of that period.

EA'GER, *adj.* } Sax. eagor; Fr. *aigre;*
EA'GERLY, *adv.* } Span. *agrio;* Ital. *agro.*
EA'GERNESS, *n. s.* } Lye says from the Sax. eggian, to stimulate; a word still used (at least egg, *v. a.*) in vulgar conversation. But Lat. *acer*, sharp, brisk, from Gr. ακις, seems the more probable derivation of the whole. Keen; sharp; ardent; acrid: hence keenly desirous; quick; vehement; animated; impetuous.

Apt as well to quicken the spirits as to allay that which is too *eager*. *Hooker.*

The air bites shrewdly; it is very cold.
—It is a nipping and an *eager* air.
Shakspeare. Hamlet.

With a sudden vigour it doth posset
And curd, like *eager* droppings into milk,
The thin and wholesome blood. *Id.*

Brutus gave the word too early,
Who having some advantage on Octavius,
Took it too *eagerly*; his soldiers fell to spoil,
Whilst we by Anthony were all inclosed.
Shakspeare.

She knew her distance, and did angle for me,
Madding my *eagerness* with her restraint. *Id.*

The flesh shrinketh, but the bone resisteth, whereby the cold becometh more *eager*.
Bacon's Natural History.

Abundance of rain froze so *eagerly* as it fell, that it seemed the depth of winter had of a sudden been come in. *Knolles's History of the Turks.*

Covetous men need neither clock nor bell to awaken them; their desires make them restless. Oh that we could with as much *eagerness* seek the true riches, which only can make us happy.
Bp. Hall. Contemplations.

Of action *eager*, and intent of thought,
The chiefs your honourable danger sought.
Dryden's Ovid.

Eager to read the rest, Achates came.
Id. Æneid.

Have you not seen, when whistled from the fist,
Some faulcon stooped at what her eye designed,
And, with her *eagerness* the quarry missed. *Dryden.*

I'll kill thee with such *eagerness* of haste,
As fiends, let loose, would lay all nature waste.
Id.

Gold will be sometimes so *eager*, as artists call it, that it will as little endure the hammer as glass itself.
Locke.

The *eagerness* and strong bent of the mind after knowledge, if not warily regulated, is often an hindrance to it. *Id.*

Nor do the *eager* clamours of disputants yield more relief to eclipsed truth, than did the sounding brass of old to the labouring moon. *Glanville's Scepsis.*

Imperfect zeal is hot and *eager*, without knowledge.
Sprat.

To the holy war how fast and *eagerly* did men go, when the priest persuaded them that whosoever died in that expedition was a martyr. *South.*

How *eagerly* he flew, when Europe's fate
Did for the seed of future actions wait. *Stepney.*

His Numidian genius
Is well disposed to mischief, were he prompt
And *eager* on it; but he must be spurred.
Addison's Cato.

Juba lives to catch
That dear embrace, and to return it too,
With mutual warmth and *eagerness* of love.
Id.

Detraction and obloquy are received with as much *eagerness* as wit and humour. *Id. Freeholder.*

The things of this world, with whatever *eagerness* they engage our pursuit, leave us still empty and unsatisfied with their fruition. *Rogers.*

A vulgar man is captious and jealous; *eager* and impetuous about trifles. He suspects himself to be slighted, thinks every thing that is said meant at him: if the company happens to laugh, he is persuaded they laugh at him: he grows angry and testy, says something very impertinent, and draws himself into a scrape, by showing what he calls a proper spirit, and asserting himself. *Chesterfield.*

Snatch not *eagerly* at every advantage offered by his unskilfulness or inattention; but point out to him kindly, that by such a move he places or leaves a piece in danger and unsupported. *Franklin.*

To all places of general resort, where the standard of pleasure is erected, we run with equal *eagerness*, or appearance of *eagerness*, for very different reasons.
Johnson.

She sees a world stark blind to what employs
Her *eager* thought, and feeds her flowing joys:
Though Wisdom hail them, heedless of her call,
Flies to save some, and feels a pang for all;
Herself as weak as her support is strong,
She feels that frailty she denied so long. *Cowper.*

As *eager* runs the market-crowd,
When, 'Catch the thief!' resounds aloud;
So Maggie runs, the witches follow,
Wi' mony an eldritch skreech and hollow.
Burns.

Then came his fit again, which to o'ercome,
As *eagerly* the barred-up bird will beat
His breast and beak against his wiry dome
Till the blood tinge his plumage, so the heat
Of his impeded soul would through his bosom eat.
Byron.

EA'GLE, *n. s.* } Fr. *aigle*; Ital. and Lat. *aquila*; Port. *aguia*. Etymologists have sometimes traced this name to the acuteness of its sight; sometimes to its swift flying (acutè videndo aut volando, Fest.) and again to its acute beak and claws (ab acumine rostri et unguium. Id.) But Ainsworth says more probably from *aquilus*, dun-colored, i. e from *aqua*, water; either because of a common color or the habits of this bird. A bird of the falcon genus. The first three compounds are obvious in their meaning. For eagle-stone, see ÆTITES, and the extract. An eaglet is a young eagle.
EA'GLE-EYED, *adj.*
EA'GLE-SIGHTED,
EA'GLE-SPEED, *n. s.*
EA'GLE-STONE,
EA'GLET,
EA'GLE-WINGED, *adj.*

If you stop the holes of a hawk's bell it will make no ring, but a flat noise or rattle; and so doth the ætites, or *eaglestone*, which hath a little stone in with it. *Bacon.*

This treason of his sons did the king express in an emblem, wherein was an *eagle* with three *eaglets* tyring on her breast, and the fourth pecking at one of her eyes. *Davies.*

The snake each year fresh skin resumes,
And *eagles* change their aged plumes;
The faded rose each spring receives
A fresh red tincture on her leaves:
But if your beauties once decay,
You never know a second May. *Carew.*

As he was quick and perspicacious, so was he inwardly *eagle-eyed*, and versed in the humours of his subjects. *Howel.*

Every one is *eagle-eyed* to see
Another's faults and his deformity. *Dryden.*

There is a lust in man no charm can tame,
Of loudly publishing his neighbour's shame;
On *eagles'* wings immortal scandals fly;
While virtuous actions are but born and die.
Harvey.

The *eaglestone* contains, in a cavity within it, a small loose stone, which rattles when it is shaken; and every fossil, with a nucleus in it, has obtained the name. The analogy between a stone, thus containing another within it, or, as the fanciful writers express it, pregnant with another, and a woman big with child, led people to imagine that it must have great virtues and effects in accelerating or retarding delivery; so that, if tied to the arm of a woman with child, it prevents abortion; and if to the leg, it promotes delivery. On such idle and imaginary virtues was raised all the credit which this famous fossil possessed for many ages. *Hill's Materia Medica.*

Arts still followed where Rome's *eagles* flew.
Pope.

Abrupt, with *eaglespeed* she cut the sky,
Instant invisible to mortal eye. *Id.*

Draw forth the monsters of the' abyss profound,
Or fetch the' aerial *eagle* to the ground. *Id.*

Eagles are said to be extremely sharp-sighted, and, when they take flight, spring perpendicularly upward, with their eyes steadily fixed upon the sun. *Calmet.*

The moles and bats in full assembly find,
On special search, the keen-eyed *eagle* blind.
And did they dream, and art thou wiser now?
Prove it—if better, I submit and bow. *Cowper.*

It has been said (I believe by D'Alembert), that the highest offices in church and state resemble a pyramid, whose top is accessible to only two sorts of animals, *eagles* and reptiles. My pinions were not strong enough to pounce upon its top, and I scorned, by creeping, to ascend its summit. *Bp. Watson.*

The EAGLE, in antiquity, was borne by way of ensign by several nations. The first who seem to have assumed the eagle are the Persians, according to Xenophon. It was afterwards assumed by the Romans; who, after a great variety of standards, at last fixed on the eagle, in the second year of the consulate of C. Marius. Till that time, they had used indifferently wolves, leopards, and eagles, according to the humor of the commander. The Roman eagles were not painted on a cloth or flag; but were figures in relievo, of silver or gold, borne on the tops of pikes: the wings being displayed, and frequently a thunderbolt in their talons. Under the eagle on the pike, were piled bucklers, and sometimes crowns. Thus much we learn from the medals. Constantine is said to have first introduced the eagle with two heads, to intimate that, though the empire seemed divided, it was yet only one body. This is proved by an eagle with two heads noted by Lipsius, on the Antonine column; as well as by the eagle having only one head on the seal of the golden bull of Charles IV. F. Menestrier maintains that, as the emperors of the east, when there were two on the throne at the same time, struck their coins with the impression of a cross, with a double traverse, which each of them held in one hand, they did the same with the eagle, but, instead of doubling it, represented it with two heads; in which they were followed by the emperors of the West. F. Papebroche rather inclines to think the use of the eagle with two heads to be merely arbitrary; though he grants it probable, that it was first introduced on the occasion of two emperors at the same time. The eagle on medals, according to M. Spanheim, is a symbol of divinity and providence; but, according to all other antiquaries, of empire. The princes on whose medals it is most usually found are, the Ptolemies, and the Seleucidæ of Syria. An eagle with the word Consecratio, expresses the apotheosis of an emperor.

EAGLE, in ancient Irish coinage, a sort of base money, current in Ireland in the first years of Edward I., about A. D. 1272; named, like the lionines, rosades, and many other coins of the same period, from the figures with which they were impressed. The current coin of the kingdom was then a composition of copper and silver, in a certain proportion, but so much below the standard of England that they were not intrinsically worth quite half so much. They were imported out of France and other foreign countries. When Edward was established on the throne, he set up mints in Ireland for coining good money, and decried the use of the eagles and all other kinds of base coins; making it death, with confiscation of effects, to import any more of them.

EAGLE, in architecture, is a figure of that bird, anciently used as an attribute, or cognizance of Jupiter, in the capital and friezes of the columns of temples consecrated to that god.

EAGLE, in astronomy, a constellation of the northern hemisphere, having its right wing contiguous to the equinoctial. See AQUILA, and ASTRONOMY. There are also three stars, denominated, among the Arab astronomers, nasr, i. e. eagle, viz. 1. Nasr sohail, the eagle of canopus; called also sitareh jemen, the star of Arabia Felix, over which it is supposed to preside; 2. Nasr althair, the flying eagle; and 3. Nasr alveke, the resting eagle.

EAGLE, in heraldry, is accounted one of the most noble bearings in armoury; and ought to be given to none but such as greatly excel in generosity and courage, or who have done singular services to their sovereigns; in which cases they may be allowed a whole eagle, or an eagle paissant, or only the head or other parts thereof, in proportion to their exploits.

EAGLE, in ornithology. See FALCO.

EAGLE, BLACK, an order of knighthood, instituted in 1701, by the elector of Brandenburgh, on his being crowned king of Prussia. The knights wear an orange colored riband, to which is suspended the annexed cross.

EAGLE, WHITE, a Polish order of knighthood, ıstituted in 1325 by Uladislaus V. on marrying is son Casimir with a daughter of the great uke of Lithuania. The badge of this order, ʻorn by the knights, is a gold cross of eight oints, enamelled gules, bordered argent, can-ɔned with flames of fire; charged in the middle ʻith a white eagle, bearing on his breast a cross f the same, environed with the arms and tro-hies of the electorate of Saxony; and on the ther side is a cypher of the king's name, with ıis motto, PRO FIDE, REGE, LEGE. The whole ırmounted with a small crown of diamonds. 'he collar is composed of golden eagles, crowned ıd chained. On all days, besides state days, ıe knights wear the cross at the extremity of a road blue riband scarf-wise. They have it also ınbroidered on the left side of their cloaks and ɔats.

EAGLE, RED, a very ancient order in Ba-ːith, of which the mar-rave is sovereign. It is ıtablished both for mi-tary and civil persons, ut is generally conferred ı officers who have ob-ıined the rank of lieute-ants-general. The badge a medal of gold, of a uadrangular form, ena-ıelled white, upon which an eagle displayed red. is worn scarf-wise, endent to a broad red atered riband, edged with ellow.

EAGLE, SPREAD, signifies an eagle with two eads, as the example. But it more heraldic to say, an eagle ith two heads displayed. Ac-ɔrding to Porney, the reason hy the emperor of Germany ears an eagle with two necks, this: on the union of the ıngdom of Romania, now a rovince of Turkey in Europe, s arms, which were an eagle displayed sable, eing the same as those of the emperor, were ıited into one body, leaving it two necks as they 'e now.

EAGLE ISLAND, an island on the South Paci-c Ocean, on the coast of New Holland, visited y captain Cook in his first voyage, is principally ıhabited by a monstrous kind of bird, the nest ' one of which measured no less than twenty-six et in circumference and two feet eight inches height. In the Philosophical Transactions, vol. X. there is an account of one of these nests still ʻger; but the bird to which it belonged was not ːen. That which our navigators saw was built ' sticks, and lay upon the ground.

EAGLESTONE. See ÆTITES.

EA'GRE, *n. s.* *Æger*, in Runic, is the ocean; *ʻgia*, in Islandic, is to agitate; to incite. A de swelling above another tide, observable in ıe river Severn. But Dryden himself says he ɔserved the eagre in the Trent, and this term, we ell know, expresses, as a provincialism, in other arts of England, the first coming in of the tide.

Dissembled Hate or vanquished Love,
Its more than common transport could not hide,
But like an *eagre* rides in triumph o'er the tide.
Dryden.

EALD'ERMAN, *n. s.* Sax. ealdɔrman, a Saxon magistrate; an ALDERMAN, which see.

EALLANGHEIRRIG, a small island in Argyleshire, situated at the mouth of Loch Ridden, in the parish of Inverchaolain, memorable in the annals of the seventeenth century. In 1685, when the duke of Monmouth attempted an invasion of the country, the unfortunate Archibald, earl of Argyle, having collected an army of 3000 men, retired to this island, which he fortified very strongly, and here deposited his spare arms and ammunition. Soon after, upon the appearance of some ships of war, the garrison surrendered, and the whole ammunition falling into the hands of the royal party, put an end to any further hostile operations on the part of that unfortunate nobleman, who with his party, found means to escape, but was soon afterwards taken, tried for high treason, and beheaded.

EAME, *n. s.* Sax. eam; Dut. *com*, uncle: a word still used in the wilder parts of Staffordshire.

Daughter, says she, fly, fly; behold thy dame
Foreshows the treason of thy wretched *eame!*
Fairfax.

EAR, *n. s.*
EAR-BORED, *adj.*
EAR-DEAFENING,
EAR-DRUM, *n. s.*
EAR-KISSING, *adj.*
EARLESS,
EAR-MARK, *n. s.* & *v. a.*
EAR-PIERCING, *adj.*
EAR-RING, *n. s.*
EAR-SHOT,
EAR-WAX,
EAR-WIG,
EAR-WITNESS.

Sax. eare; Goth. *eyr* and *auso;* Dan. *ere* or *oore;* Swed. *are;* Teut. *ahr, ohr;* Fr. *oreille;* Ital. *orecchio;* Lat. *auris*. Junius derives the Gothic verb *haus-jan*, to hear, from the above (*auso*) noun, and both from the Greek οὐς. The organ of hearing; and sometimes the prominent part of that organ only; also the handle or prominent part of a vessel. Attention to a suit or person; the power of ascertaining sounds or harmony: also the spike of corn, or that part which contains the seed. To be, to fall, or go together by the ears, is to quarrel or scuffle, in which those organs sometimes obtain rough treatment. To set by the ears is to excite to strife or quarrelling. To be up to the ears is to be deeply immersed. Ear-bored is, marked in the ear; sometimes to be so marked was a token, as among the Jews and Romans, of servitude. Ear-deafening is stunning. To ear-mark, to mark (cattle, generally) on the ear. Ear-shot is the reach or compass of the ear, with regard to hearing sounds: ear-wig, a species of forficula, imagined to creep into the ear. Ear-witness, one who has heard what he attests. Earless, without ears.

And he bigan to seye to hem, for in this day this scripture is fulfilled in youre *eeris*. *Wiclif. Luke* iv.

In that tyme Jhesus weute bi cornes in the Sabot dai, and hise disciplis hungriden and bigunnen to plucke the *eeris* of corn, and to ete. *Id. Matt.* xii.

His *ears* are open unto their cry. *Psalm* xxxiv. 15.

His master shall bore his *ear* through with an awl
Exod.

The frere arose,
But I suppose,
Amased was his hed,
He shoke his *eares*
And from grete feares,
He thought hym well yfled.
Sir T. More.

Poor naked men laboured one another with shagged sticks, or dully fell together by the *ears* at fisty-cuffs. *More.*

Sir J. Perrot ordered the Irish to mark all their cattle with pitch or *ear-mark*, on pain of forfeiture. *Cox. Hist. Ireland.*

For feare lest we like rogues should be reputed
And for *eare-marked* beasts abroad be bruited.
Spenser.

All present were made *earwitnesses*, even of each particular branch of a common indictment. *Hooker.*

With gold and silver they increase his store,
And gave the precious *earrings* which they wore.
Sandys.

Their warlike force was sore weakened, the city beaten down about their *ears*, and most of them wounded. *Knolles.*

An unworthie counceller is a wicked charme in the king's *eare*, a sword of terror in the aduice of tyranny. *Breton.* 1616.

You have heard of the news abroad: I mean the whispered ones; for they are yet but *ear-kissing* arguments. *Shakspeare.*

The burst
And the *eardeafening* voice of the oracle,
Kin to Jove's thunder. *Id.*

O, farewell!——
The spirit-stirring drum, the *ear-piercing* fife,
The royal banner; and all quality,
Pride, pomp, and circumstance of glorious war! *Id.*

What fire is in my *ears?* Can this be true?
Stand I condemned? *Id. Much Ado.*

Aristippus was earnest suitor to Dionysius for some grant, who would give no *ear* to his suit: Aristippus fell at his feet, and then Dionysius granted it. *Bacon's Apophthegms.*

Himself he on an *earwig* set;
Yet scarce he on his back could get,
So oft and high he did curvet. *Drayton's Nymphiad.*

Princes, that will but hear, or give access
To such officious spies, can ne'er be safe:
They take in poison with an open *ear*,
And, free from danger, become slaves to fear.
Ben Jonson.

Nor can I bide to pen some hungrie scence
For thick-skin *eares*, and undiscerning eyne.
Bp. Hall. Satires.

O age well thriven and well fortunate,
When ech man hath a muse appropriate;
And shee like to some servile *eare-boared* slave,
Must play and sing when and what he would have.
Id.

This gold is now grown to a calf; let no man think that form came forth casually out of the melted *earrings*: this shape was intended by the Israelites, and perfected by Aaron. *Id. Contemplations.*

There are some vessels, which, if you offer to lift by the belly or bottom, you cannot stir them; but are soon removed, if you take them by the *ears*. *Taylor's Rule of Holy Living.*

He laid his sense closer, and in fewer words, according to the style and *ear* of those times. *Denham.*

The leaves on trees not more,
Nor bearded *ears* in fields, nor sands upon the shore.
Dryden.

Gomez, stand you out of *earshot*.—I have something to say to your wife in private. *Id. Spanish Friar.*

Better pass over an affront from one scoundrel, than draw the whole herd about a man's *ears*. *L'Estrange.*

Fools go together by the *ears*, to have knaves run away with the stakes. *Id.*

A mean rascal sets others together by the *ears* without fighting himself. *Id.*

The *ear* being to stand open, because there was some danger that insects might creep in thereat; therefore hath nature loricated or plaistered over the sides of the hole with *earwax*, to entangle insects. *Ray on the Creation.*

Be not alarmed, as if all religion was falling about our *ears*. *Burnet's Theory.*

It is usual to set these poor animals by the *ears*. *Addison.*

All Asia now was by the *ears*,
And gods beat up for volunteers. *Prior.*

A quilted night cap with one *ear*.
Congreve. Way of the World.

A pot without an *ear*. *Swift.*

Doll never flies to cut her lace,
Or throw cold water in her face,
Because she heard a sudden drum,
Or found an *earwig* in a plum. *Id.*

I may say of him (Mr. John Smith) in Antonius's phrase, he was—dipped into justice, as it were, over head and *ears*; he had not a slight superficial tincture, but was dyed and coloured quite through with it. *Bp. Patrick.*

In cases where there is little expected but the pleasure of the *ears* and eyes, the least diminution of that pleasure is the highest offence. *Steele.*

Eloquence, that leads mankind by the *ears*, gives a nobler superiority than power that every dunce may use, fraud that every knave may employ, to lead them by the nose. *Bolingbroke.*

If on a pillory, or near a throne,
He gain his prince's *ear*, or lose his own. *Pope.*

Earless on high stood unabashed Defoe,
And Tutchin flagrant from the scourge below. *Id.*

Valsalva discovered some passages into the region of the *ear-drum*; of mighty use, among others, to make discharges of bruises. *Derham's Physico-Theology.*

She used to carry tales from one to another, till she had *set* the neighbourhood together *by the ears*. *Arbuthnot.*

A lady bestowed *earrings* upon a favourite lamprey. *Id.*

The histories of mankind, written by eye or *earwitnesses*, are built upon this principle. *Watts's Logick.*

Earwigs and snails seldom infect timber. *Mortimer's Husbandry.*

From several grains he had eighty stalks, with very large *ears*, full of large corn. *Id.*

An opera, like a pillory, may be said
To nail our *ears* down, but expose our head.
Young.

But corn was housed, and beans were in the stack;
Now therefore issued forth the spotted pack,
With tails high mounted, *ears* hung low, and throats
With a whole gamut filled of heavenly notes;
For which, alas! my destiny severe,
Though *ears* she gave me two, gave me no *ear*.
Cowper.

He calls for Famine, and the meagre fiend
Blows mildew from between his shrivelled lips,
And taints the golden *ear*. *Id.*

Lit by the brilliant spark, from grain to grain
Runs the quick fire along the kindling train;
On the pained *ear-drum* bursts the sudden crash,
Starts the red-flame, and death pursues the flash.
Darwin.

As the *ear-wax* in animals seems to be in part designed to prevent fleas and other insects from getting into their *ears*. *Id.*

Sylphs! on each oak-bud wound the wormy galls,
With pigmy spears, or crush the venomed balls;
Fright the green locust from his foamy bed,
Unweave the caterpillar's gluey thread;
Chase the fierce *earwig*, scare the bloated toad,
Arrest the snail upon his slimy road. *Id.*

EAR. See ANATOMY, Index, and DEAF, where the structure of this important organ is fully developed. Suetonius mentiens the beauties of Augustus's ear; and Ælian, describing the beauties of Aspasia, observes she had short ears. Martial also ranks large ears among deformities. Among the Athenians, it was a mark of nobility to have the ears bored or perforated: but among the Hebrews and Romans, it was a mark of servitude. Several naturalists and physicians have held, that cutting off the ear rendered persons barren and unprolific; and this idle notion was what first occasioned legislators to order the ears of thieves, &c., to be cut off, lest they should produce their like.

EAR, in botany, is usually called spica. The flowers and seeds of wheat, rye, barley, lavender, &c., grow in ears. The stem of the ear means its tube or straw; the knot of the ear, the lobes or cells wherein the grains are enclosed, &c.

EAR, in music. See MUSIC. In music we seem universally to acknowledge a kind of internal sense, distinct from the external one of hearing; which we call a good ear. And the like distinction we should probably acknowledge in regard to our other senses, were our ideas of the differences equally clear. Something like this is universally acknowledged with regard to a critical and accurate perception and judgment of the objects of sight; though, by a familiar metaphor, these sensations are transferred to a sense that has no connexion with them. Thus a greater capacity of perceiving the beauties of painting, architecture, &c. is called a fine taste.

EAR, *v. a.* & *v. n.* / EAR'ABLE, *adj.* / EAR'ED, *adj.* / EAR'ING, *n. s.* Norm. Fr. *eare*; Sax. erian; Brit. *aeren*; Germ. *eren*; Goth. *arian*; Lat. *aro*. Earth, says Mr. H. Tooke (Diversions of Purley ii. 417, 8), is that which one ereth, or eareth, i. e. plougheth; the third person of the indicative *erian*, *arare*, to ere, eare, or plough. *Erd*, i. e. ered, er'd, that which is ploughed; the past tense of the same verb. To till; to plough; to shoot into ears. Earable is the origin of our modern word ARABLE, which see. Earing, a plowing of land.

But who of you hath a seruaunt *eringe* or leseuringe oxis which seith to him, whanne he turneth agen fro the feeld, anoon go and sitte to mete.
Wiclif. Luk. 17.

A rough valley, which is neither *eared* nor sown.
Deut.

Five years, in the which there shall neither be *earing* nor harvest. *Gen.* xlv. 6.

He that *ears* my land spares my team, and gives me leave to enjoy the crop.
Shakspeare. All's Well That Ends Well.

Menecrates and Menas, famous pirates,
Make the sea serve them, which they *ear* and wound
With keels of every kind. *Id. Antony and Cleopatra.*

The covert of the thrice *eared* field
Saw stately Ceres to her passion yield.
Pope's Odyssey.

EARL, *n. s.* / EARL'DOM, / EARL-MAR'SHAL, Sax. eorl, which Spelman and others have thought synonymous with ealderman; but see Turner's Anglo-Sax. vol. ii. 233. Wachter thinks earl a diminutive of *are*, Sax.; Belg. *eer*; Ger. *er* (ere, English): hence seniority and priority. A nobleman who ranks next to a marquis: an earl-marshal is a superintendant of high or military solemnities.

The duke of Clarence having married the heir of the earl of Ulster, and by her having all the *earldom* of Ulster, carefully went about redressing evils.
Spenser's Ireland.

Thanes and kinsmen,
Henceforth be *earls*, the first that ever Scotland
For such an honour named. *Shakspeare. Macbeth*

When I am king, claim thou of me
The *earldom* of Hereford. *Id. Richard III.*

The *earl* of Newcastle, in the depth of winter, rescued the city of York from the rebels. *Clarendon.*

The marching troops through Athens take their way;
The great *earl-marshal* orders their array. *Dryden.*

An EARL ranks between a marquis and a viscount. The title is so ancient, that its original cannot be clearly traced out. It is, however, certain, that among the Saxons they were called ealdormen, quasi elder men, signifying the same with senior or senator among the Romans: and also schiremen, because they had each the civil government of a division or shire. On the irruption of the Danes they changed their names to eorles, which, according to Camden, signified the same in their language. In Latin they are called comites from being the king's companions and associates. After the Norman conquest they were for some time called counts, from the French; but they did not long retain that name, though their shires are thence called counties, and their wives countesses, to this day. It is now become a mere title: their lordships have no official connexion with the government of the county; which is now entirely devolved on the sheriff, the earl's deputy, or vice-comes. In writs, commissions, and other formal instruments, the king, when he mentions any peer of the degree of an earl, usually styles him 'trusty and well beloved cousin:' an appellation as ancient as the reign of Henry IV; who being either by his wife, mother, or sisters, actually related or allied to every earl in the kingdom, artfully acknowledged that connexion in all his letters and other public acts; whence the usage has descended to his successors. An earl is created by cincture of sword, mantle of state put upon him by the king himself, a cap and a coronet put upon his head, and a charter in his hand. An earl's coronet is composed of eight pearls raised upon points, with small leaves between, above the rim, as in the diagram annexed.

EARL MARSHAL. See MARSHAL

EAR'LY, *adj.* & *adv.* } Sax. ærlice; Goth.
EAR'LINESS, *n. s.* } *ærla*, from *ær*; Goth. and Sax. ær, soon; or ar, day-break. Soon; precocious; betimes. Earliness is the act or quality of being soon.

And al the puple roos *eerli* to come to him in the temple, and to heere him. *Wiclif. Luk.* 21.

So had I spokin with them everych one,
That I was of ther felaship anone;
And madè forward *erli* for to rise,
To take our weye, ther as I did devise. *Chaucer.*

The joyous day 'gan *early* to appear,
And fair Aurora from her dewy bed
Of aged Tithone 'gan herself to rear,
With rosy cheeks, for shame as blushing red.
Spenser.

I am a tainted wether of the flock,
Meetest for death: the weakest kind of fruit
Drops *earliest* to the ground, and so let me.
Shakspeare.

The goodness of the crop is great gain, if the goodness answer the *earliness* of coming up. *Bacon.*

It is a curiosity to have several fruits upon one tree; and the more when some of them come *early*, and some come late. *Id. Natural History.*

None in more languages can show
Those arts, which you so *early* know. *Waller.*

The next morning we, having striven with the sun's *earliness*, were beyond the prospect of the highest turrets. *Sidney.*

God made all the world, that he might be worshipped in some parts of the world; and therefore, in the first and most *early* times of the church, what care did he manifest to have such places erected to his honour? *South.*

The princess makes her issue like herself, by instilling *early* into their minds religion, virtue, and honour. *Addison.*

Sickness is *early* old age: it teaches us diffidence in our earthly state and inspires us with thoughts of a future. *Pope.*

Oh soul of honour!
Oh *early* heroe! *Smith's Phædra and Hippolitus.*

Early submission is the truest lesson to those who would learn to rule. *Goldsmith.*

This method fixes the attention of children extremely to the orthography of words, and makes them good spellers very *early*. *Franklin.*

The great misfortune of my life was to want an aim. I had felt *early* some stirrings of ambition, but they were the blind groupings of Homer's Cyclops round the walls of his cave. I saw my father's situation entailed on me perpetual labour. *Burns.*

From the *earliest* dawnings of policy to this day, the invention of men has been sharpening and improving the mystery of murder, from the first rude essay of clubs and stones, to the present perfection of gunnery, cannoneering, bombarding, mining. *Burke.*

The year 1731-2, which is the *earliest* date of any trials for these offences, that I happen to have met with, was only thirty-two years after the act of King William had passed, and only sixteen after that of Queen Anne, and during that period there had been scarcely any sensible diminution in the value of money. *Sir S. Romilly.*

With more capacity for love than earth
Bestows on most of mortal mould and birth,
His *early* dreams of good outstripped the truth,
And troubled manhood followed baffled youth.
Byron.

EARN, *v. a.* } From Sax. earnian, to pur-
EARN'ING, *n. s.* } sue. To win; deserve; labor for; gain.

I can't say whore;
It does abhor me, now I speak the word:
To do the act, that might the' addition *earn*,
Not the world's mass of vanity could make me.
Shakspeare.

Those that have joined with their honour great perils, are less subject to envy; for men think that they *earn* their honours hardly. *Bacon's Essays.*

Winning cheap the high repute,
Which he through hazard huge must *earn*. *Milton.*

Men may discern
From what consummate virtue I have chose
This perfect man, by merit called my Son,
To *earn* salvation for the sons of men. *Id.*

So Labeo weens it my eternal shame
To prove I never *earned* a poet's name.
Bp. Hall. Satires

This is the great expence of the poor, that takes up almost all their *earnings*. *Locke.*

The poems gained the plagiary wealth, while the author hardly *earned* his bread by repeating them.
Pope on Homer.

After toiling twenty days,
To *earn* a stock of pence and praise,
Thy labour's grown the critick's prey. *Swift.*

EARNE, LOUGH, a lake of Ireland, in Fermanagh, Ulster, the second in that island for magnitude. It is about thirty-five miles in length, but of very unequal breadth, being in some places ten, and in others not above one. It is properly two lakes, which are joined by a narrow channel at the town of Inniskilling, both branches contracting towards this point. There are a number of small rivers, that fall chiefly from the heights of the northern and southern confines, which, after enriching the country, supply this large basin. The only outlet is a short and rapid river that runs to the sea by the port of Ballyshannon. The Lough abounds with pike, perch, trout, eel, and numerous other species of fresh-water fish. Salmon emigrate a considerable length, but are usually caught at Belleek village. The beauties of this lake have long been the boast of the country and the admiration of strangers. The vast variety of figures and assemblages, in which nature is here displayed, can hardly be conceived, but from actual observation. The country is of that diversified character, which loses not by abundance of the same materials. The mingled prospect of water, wood, islands, and mountains, is inconceivably picturesque and grand. The islands are so thickly clustered and interspersed, that they are almost innumerable. The natives say there are 365, or one for each day in the year. They are every where crowned with deep aspiring woods and luxuriant pastures, which evince the fertility of the soil. The solitary recesses of these islands are the habitation of the stag and the roebuck; the rocky cliffs, of the ospray and the sea eagle. The islands in some places slope gradually to the water-edge, and in others rise in bold shores. The coasts of the lake ascend gradually to lofty eminences, which tower in solemn grandeur above the milder beauty of the scene below.

EAR'NEST, *adj.* & *n. s.* } Also from the
EAR'NESTNESS, } Sax. verb earnian, to pursue (see EARN). Ardent; intent; warm; importunate; serious. As a substantive, earnest is reality; seriousness; opposed to joking:

and a pledge given to prove a serious intention, or a bargain made. Earnestness is also seriousness, and synonymous with earnest as a substantive.

Which is the *eernys* of oure eritage into the redempcioun of purchesyng into hertyng of his glory. *Wiclif. Effesies.* 1.

This Palamon, when he these words herd,
Dispiteously he looked and answerd,
Whether sayest this in *ernest* or in play?
Chaucer. Cant. Tales.

Therewith she laughed, and did her *earnest* end in jest. *Faerie Queene.*

He which prayeth in due sort, is thereby made the more attentive to hear; and he which heareth, the more *earnest* to pray for the time which we bestow, as well in the one as the other. *Hooker.*

The apostles term it the handsel or *earnest* of that which is to come. *Id.*

That high All-seer, which I dallied with,
Hath turned my feigned prayer on my head,
And given in *earnest*, what I begged in jest.
Shakspeare.

You have conspired against our person,
Joined with an enemy proclaimed, and from his coffers
Received the golden *earnest* of our death. *Id.*

Why so *earnestly* seek you to put up that letter? *Id.*

I observing,
Took once a pliant hour, and found good means
To draw from her a prayer of *ernest* heart,
That I would all my pilgrimage dilate,
Whereof by parcels she had something heard,
But not distinctively. *Id. Othello.*

Often with a solemn *earnestness*,
More than, indeed, belonged to such a trifle,
He begged of me to steal it. *Id.*

Audacity and confidence doth in business so great effects, as a man may doubt, that besides the very daring and *earnestness*, and persisting and importunity, there should be some secret binding, and stooping of other men's spirits to such persons.
Bacon's Natural History.

My soul, more *earnestly* released,
Will outstrip her's; as bullets flown before,
A latter bullet may o'ertake, the powder being more.
Donne.

Nor can I think that God, Creator wise!
Though threatening, will in *earnest* so destroy
Us, his prime creatures. *Milton.*

On that prospect strange,
Their *earnest* eyes they fixed; imagining,
For one forbidden tree, a multitude
Now risen, to work them further woe or shame.
Id.

When *earnestly* they seek
Such proof, conclude they then begun to fail. *Id.*

They are never more *earnest* to disturb us, than when they see us most *earnest* in this duty. *Duppa.*

Which leader shall the doubtful victory bless,
And give an *earnest* of the war's success. *Waller.*

But the main business and *earnest* of the world is money, dominion, and power. *L'Estrange.*

With overstraining, and *earnestness* of finishing their pieces, they often did them more harm than good. *Dryden.*

Take heed that this jest do not one day turn to earnest. *Sidney.*

Shame is a banishment of him from the good opinion of the world, which every man most *earnestly* desires. *South.*

How a man may know whether he be so in *earnest* is worth inquiry: and I think there is one unerring mark of it, viz. the not entertaining any proposition with greater assurance than the proofs it is built upon will warrant. *Locke.*

It may be looked upon as a pledge and *earnest* of quiet and tranquillity. *Smalridge.*

We shall die in *earnest*, and it will not become us to live in jest. *Government of the Tongue.*

Sempronius, you have acted like yourself;
One would have thought you had been half in *earnest*.
Addison.

Marcus is overwarm; his fond complaints
Have so much *earnestness* and passion in them,
I hear him with a secret kind of horror,
And tremble at his vehemence of temper.
Id. Cato.

Pay back the *earnest* penny received from Satan, and fling away his sin. *Decay of Piety.*

There never was a charge maintained with such a shew of gravity and *earnestness*, which had a slighter foundation to support it. *Atterbury.*

The mercies received, great as they are, were *earnests* and pledges of greater. *Id.*

And then fair Haidee tried her tongue at speaking,
But not a word could Juan comprehend,
Although he listened so, that the young Greek in
Her *earnestness* would ne'er have made an end.
Byron.

EARNEST, ARRHA. By the civil law, he who recedes from his bargain loses his earnest, and if the person who received the earnest give back, he is to return the earnest double. But with us, the person who gave it, is in strictness obliged to abide by his bargain; and in case he decline it, is not discharged upon forfeiting his earnest, but may be sued for the whole money stipulated.

EAR-RING, in the sea language, is that part of the bolt-rope which at the four corners of the sail is left open, in the shape of a ring. The two uppermost parts are put over the ends of the yard-arms, and so the sail is made fast to the yard; and into the lowermost ear-rings, the sheets and tacks are seized or bent at the clew.

EARSH, *n. s.* From *ear*, to plough. A ploughed field. Not now in use.

Fires oft are good on barren *earshes* made,
With crackling flames to burn the stubble blade.
May's Virgil.

EARTH, *n. s.*, *v. a.* & *v. n.*
EARTH'BOARD, *n. s.*
EARTH'BORN, *adj.*
EARTH'BOUND,
EARTH'BRED,
EARTH'CREATED,
EARTH'CREEPING,
EARTH'EN,
EARTH'FED,
EARTH'FLAX, *n. s.*
EARTH'LINESS,
EARTH'LING,
EARTH'-LOVING, *adj.*
EARTH'LY, *adj.*
EARTH'MOVING, *n. s.*
EARTH'NUT, *n. s.*
EARTH'QUAKE,
EARTH'SHAKING,
EARTH'WORM,
EARTH'Y, *adj.*

Sax. eard, earth: that which one eareth, says Mr. Tooke. See EAR, *v. a.* But a similar word is found in the Oriental languages, as Arab. *erd*; and Heb. אֶרֶץ, from רָצַץ, to break in pieces (Parkhurst) or crumble. The terraqueous globe; the world, or some modification of it. As a verb active, to hide, bury, or deposit in the earth: as a neuter verb, to retire, or lie hid in the ground. An earth-board is a particular part of a plough: earth-created is used by Young for made of the earth: earth-fed means

low, abject; and this term, in composition, frequently expresses the idea of low, or grovelling: earth-flax is a fibrous, flaxy-looking fossil: earthling an inhabitant of earth; a mortal: earthnut, a pignut, or root of the appearance of a nut. The other compounds seem to require no explanation.

Nile ye deme that I came to sende pees into *erthe*: I cam not to sende pees, but swerd. *Wiclif. Matthew* 10.

I saigh whanne he hadde opened the sixte seel, and lo a greet *erthemouyng* was maad. *Id. Apocalips* 6.

The whole *earth* was of one language. *Gen.* xi. 1.

Whereby he [Virgil] would insinuate that there is an igneous, luminous, or æthereal vehicle alwaies intimately adhering to the soul, though it be much slaked or damped with the gross and crude moisture of the body during this *earthly* peregrination. *More. App. to Def. of Phil. Cab.* fol. 134.

Our common necessities, and the lack which we all have as well of ghostly as of *earthly* favours, is in each kind easily known. *Hooker.*

Great grace that old man to him given had,
For God he often saw, from heaven hight,
All were his *earthly* eyen both blunt and bad. *Spenser.*

All the world by thee at first was made,
And daily yet thou dost the same repair:
Ne ought on *earth* that merry is and glad,
Ne ought on *earth* that lovely is and fair,
But thou the same for pleasure didst prepare. *Id.*

Nought so vile that on the *earth* doth live,
But to the *earth* some special good doth give. *Shakspeare.*

About his shelves
Green *earthen* pots, bladders, and musty seeds
Were thinly scattered. *Id.*

Long mayest thou live in Richard's seat to sit,
And soon lie Richard in an *earthy* pit. *Id.*

Teach me, dear creature, how to think and speak;
Lay open to my *earthy* gross conceit,
Smothered in errors. *Id.*

They can judge as fitly of his worth,
As I can of those mysteries which heaven
Will not have *earth* to know. *Id. Coriolanus.*

But I remember now
I'm in this *earthly* world, where to do harm
Is often laudable; to do good, sometime
Accounted dangerous folly. *Id. Macbeth.*

Who can impress the forest, bid the tree,
Unfix his *earthbound* root? *Id.*

You have scarce time
To steal from spiritual leisure a brief span,
To keep your *earthly* audit. *Id. Henry VIII.*

If you be born so near the dull-making cataract of Nilus, that you cannot hear the planet-like music of poetry; if you have so *earth-creeping* a mind that it cannot lift itself up to look to the sky of poetry; * * * * * Thus much curse I must lend you in the behalf of all poets, that while you live, you live in love, and never get favour for lacking skill of a sonnet. *Sir P. Sidney.*

But from this *earth*, this grave, this dust,
My God shall raise me up I trust. *Raleigh.*

The great winding-sheets that bury all things in oblivion are two, deluges and *earthquakes*. *Bacon.*

Worms are found in snow commonly, like *earthworms*, and therefore it is not unlike that it may likewise put forth plants. *Id. Nat. Hist.*

It is heaven upon *earth* to have a man's mind move in charity, rest in providence, and turn upon the poles of truth. *Lord Bacon.*

Such *earth-fed* minds
That never tasted the true beams of love. *B. Jonson.*

These tumults were like an *earthquake*, shaking the very foundations of all, than which nothing in the world hath more of horrour. *King Charles.*

Peasants:—*earth-bred* worms! *Brewer.*

Earthly greatness is a nice thing, and requires so much chariness in the managing, as the contentment of it cannot requite. *Hall.*

There is many a rich stone laid up in the bowels of the *earth*, many a fair pearl laid up in the bosom of the sea, that never was seen, nor never shall be. *Bp. Hall. Contemplations.*

Earth up with fresh mould the roots of those auriculas which the frost may have uncovered. *Evelyn's Calendar.*

We should affirm, that all things were in all things; that heaven were but *earth* celestified, and *earth* but heaven terrestrified; or that each part above had influence upon its affinity below. *Browne's Vulgar Errours.*

Nor is my flame
So *earthy*, as to need the dull material force
Of eyes, or lips, or cheeks. *Denham's Sophy.*

Wherefore did Nature pour her bounties forth
With such a full and unwithdrawing hand,
Covering the *earth* with odours, fruits, and flocks,
Thronging the seas with spawn innumerable,
But all to please and sate the curious taste? *Milton.*

When faith and love, which parted from thee never,
Had ripened thy just soul to dwell with God,
Meekly thou didst resign this *earthly* load
Of death, called life *Id.*

By the *earthshaking* Neptune's mace,
And Tethy's grave majestic pace. *Id.*

Him lord pronounced, he, O indignity!
Subjected to his service angel-wings,
And flaming ministers to watch and tend
Their *earthy* charge. *Id. Paradise Lost.*

The master saw the madness rise;
His glowing cheeks, and ardent eyes;
And, while he heaven and *earth* defied,
Changed his hand and checked his pride. *Dryden.*

In ten set battles we have driven back
These heathen Saxons, and regained our *earth*,
As *earth* recovers from the ebbing tide *Id.*
The wounds I make but sow new enemies;
Which, from their blood, like *earthborn* brethren rise. *Id.*

Was it his youth, his valour, or success,
These might perhaps be found in other men:
'Twas that respect, that awful homage paid me;
That fearful love which trembled in his eyes,
And with a silent *earthquake* shook his soul. *Id.*

Those *earthy* spirits black and envious are;
I'll call up other gods of form more fair. *Id.*

The fox is *earthed*; but I shall send my two terriers in after him. *Id. Spanish Friar.*

This solid globe we live upon is called the *earth*, which word, taken in a more limited sense, signifies such parts of this globe as are capable, being exposed to the air, to give rooting and nourishment to plants, so that they may stand and grow in it. *Locke.*

Where there are *earthnuts* in several patches, though the roots lie deep in the ground, and the stalks be dead, the swine will by their scent root only where they grow. *Ray.*

Upon a shower, after a drought, *earthworms* and land snails innumerable come out of their lurking-places. *Id.*

The country, by reason of its vast caverns and subterraneous fires, has been miserably torn by *earthquakes*, so that the whole face of it is quite changed. *Addison on Italy.*

The god for ever great, for ever king,
Who slew the *earthborn* race and measures right
To heaven's great habitants! *Prior.*

To *earthlings*, the footstool of God, that stage which he raised for a small time, seemeth magnificent. *Drummond.*

Such land as ye break up for barley to sow,
Two *earths*, at the least, ere ye sow it bestow. *Tusser.*

The five genera of *earths* are, 1. Boles. 2. Clays. 3. Marls. 4. Ochres. 5. Tripelas. *Hill's Mat. Medica.*

Of English talc, the coarser sort is called plaister or parget; the finer, *earthflax*, or salamander's hair. *Woodward.*

As a rustick was digging the ground by Padua, he found an urn, or *earthen* pot, in which there was another urn, and in this lesser a lamp clearly burning. *Wilkins.*

Lamps are inflamed by the admission of new air, when the sepulchres are opened, as we see in fat *earthy* vapours of divers sorts. *Id. Math. Mag.*

It must be our solemn business and endeavour, at fit seasons, to turn the stream of our thoughts from *earthly* towards divine objects. *Atterbury.*

The plow reckoned the most proper for stiff black clays, is one that is long, large, and broad, with a deep head and a square *earthboard*, so as to turn up a great furrow. *Mortimer.*

Hence foxes *earthed*, and wolves abhorred the day,
And hungry churls ensnared the nightly prey. *Tickel.*

Sudden he viewed, in spite of all her art,
An *earthly* lover lurking at her heart. *Pope.*

Now scarce withdrawn the fierce *earthshaking* power,
Jove's daughter Pallas watched the fav'ring hour;
Back to their caves she bade the winds to fly,
And hushed the blustering brethren of the sky. *Id.*

Poor, *earth-created* man! *Young.*

—— a thousand furies more did shake
Those weary realms, and kept *earth-loving* man awake. *Armstrong.*

It is no uncommon thing for the honour of an *earthly* monarch to be wounded through the sides of his ministers. *Mason.*

The only amaranthine flower on *earth*
Is virtue; the only lasting treasure, truth. *Cowper.*

Behold your bishop! well he plays his part,
Christian in name, and infidel in heart;
Ghostly in office, *earthly* in his plan,
A slave at court, elsewhere a lady's man. *Id.*

Man mounts on man, on camels camels rush,
Hosts march o'er hosts, and nations nations crush,—
Wheeling in air the winged islands fall,
And one great *earthy* ocean covers all! *Darwin.*

Earthquakes have raised to heaven the humble vale,
And gulfs the mountain's mighty mass entombed;
And where the' Atlantic rolls wide continents have bloomed. *Beattie.*

Earth's coarsest bread, the garden's homeliest roots,
And scarce the summer luxury of fruits,
His short repast in humbleness supply
With all a hermit's board would scarce deny. *Byron.*

Impart
The purity of heaven to *earthly* joys,
Expel the venom and not blunt the dart—
The dull satiety which all destroys—
And root from out the soul the deadly weed which cloys. *Id.*

How tne lit lake shines, a phosphoric sea,
And the big rain comes dancing to the *earth!*
And now again 'tis black,—and now, the glee
Of the loud hills shakes with its mountain-mirth,
As if they did rejoice o'er the young *earthquake's* birth. *Id.*

EARTH, in ancient philosophy. See CHEMISTRY and ELEMENT.

The EARTH, in astronomy, is one of the primary planets. See ASTRONOMY. 'Although the relative densities of the earth and most of the other planets have been known a considerable time, it is but very lately that we have come to the knowledge of the absolute gravity or density of the whole mass of the earth. This, says Dr. Hutton, I have calculated and deduced from the observations of Dr. Maskelyne, astronomer royal, at the mountain Schehallien in the years 1774, 5, and 6. The attraction of that mountain on a plummet, being observed on both sides of it, and its mass being computed from a number of sections in all directions, and consisting of stone; these data being then compared with the known attraction and magnitude of the earth, gave by proportion its mean density; which is to that of water as nine to two, and to common stone as nine to five; from which very considerable mean density, it may be presumed, that the internal parts contain great quantities of metals. From the density now found,' adds this writer, 'its quantity of matter becomes known, being equal to the product of its density by its magnitude.'

Mr. Boyle suspected that there are great, though slow, internal changes, in the mass of the earth. He argues from the varieties observed in the change of the magnetic needle, and from the observed changes in the temperature of climates. But as to the latter, there is reason to doubt that he could not have diaries of the weather sufficient to direct his judgment. *Boyle's Works, Abr.* Vol. I, p. 292, &c.

Respecting the figure of the earth, the ancients had various opinions: some, as Anaximander and Leucippus, held it cylindrical, or in the form of a drum: but the most general opinion was, that it was flat; that the visible horizon was the boundary of the earth, and the ocean the boundary of the horizon: that the heavens and earth above this ocean were the whole visible universe: and that all beneath the ocean was Hades. Of this opinion were some of the Christian fathers, as Lactantius, St. Augustine, &c. Such of the ancients, however, as understood any thing of astronomy, and especially the doctrine of eclipses, must have been acquainted with the circular figure of the earth; as the ancient Babylonian astronomers, who had calculated eclipses long before the time of Alexander, and Thales the Grecian, who predicted an eclipse of the sun. It is now indeed agreed on all hands, that the form of the terraqueous globe is globular or very nearly so. See ASTRONOMY. This is equally evident from the eclipses of the sun and of the moon; in all of which the earth's shadow appears circular upon the face of those bodies, what way soever it be projected, whether east, west, north, or south; and howsoever its diameter vary, according to the greater or less distance from the earth. The spherical figure of the earth is also

evinced from the rising and setting of the sun, moon, and stars; all which happen sooner to those who live to the east and later to those living to the west, and that more or less so, according to the distance. So also, going or sailing to the north, the north-pole and northern stars become more elevated, and the south-pole and southern stars more depressed; the elevation northerly increasing equally with the depression southerly; and either of them proportionably to the distance gone. The same thing happens in going to the south. Besides, the oblique ascensions, descensions, emersions, and amplitudes of the rising and setting of the sun and stars, in every latitude, are agreeable to the earth's spherical form: all which could not happen if it were of any other figure. The globular form of the earth is farther confirmed by its having been often sailed round: the first of these important voyages was made in 1519, by Ferdinand Magellan, who accomplished it in 1124 days. In 1557 Sir Francis Drake performed the same voyage in 1056 days: in 1586 Sir Thomas Cavendish performed it in 777 days; Simon Cordes, of Rotterdam, in 1590, in 1575 days: in 1598 Oliver Noort, a Hollander, in 1077 days; Van Schouten, in 1615, in 749 days; Jacob Heremites and John Huygens, in 1623, in 802 days. Many others have since performed it, particularly Anson, Bougainville, and Cook; sometimes sailing round by the east sometimes by the west, till at length they arrived again in Europe, whence they set out; and, in the course of their voyage, observed that all the phenomena, both of the heavens and the earth, correspond to, and prove this spherical figure.

The natural cause of this form of the globe is, according to Sir Isaac Newton, the great principle of attraction, with which the Creator has endued all the matter in the universe; and by which all bodies, and all the parts of bodies, mutually attract one another. This is also the cause of the sphericity of the drops of rain, quicksilver, &c. The inequality of the surface of the earth, by mountains and valleys, is nothing considerable; the highest eminence being scarcely equivalent in its proportion to the bulk of the earth to the minutest protuberance on the surface of an orange. Its difference from a perfect sphere, however, is more considerable in another respect, by which it approaches nearly to the shape of an oblate spheroid; being a little flatted at the poles, and raised about the equatorial parts, so that the axis from pole to pole is less than the equatorial diameter. What gave the first occasion to the discovery of this important circumstance was, the observations of some French and English philosophers in the East Indies, and other parts, who found that pendulums, the nearer they came to the equator, performed their vibrations slower: whence it follows, that the velocity of the descent of bodies, by gravity, is less in countries nearer to the equator; and consequently that those parts are farther removed from the centre of the earth, or from the common centre of gravity. See the History of the Royal Academy of Sciences, by Du Hamel, p. 110, 156, 206; and L'Histoire de l'Academie Roy. 1700 and 1701. These observations having established the fact also stimulated M. Huygens and Sir Isaac Newton to investigate the cause of this phenomenon; which they attributed to the revolution of the earth about its axis. If the earth were in a fluid state, its rotation round its axis would necessarily make it put on such a figure, because, the centrifugal force being greatest towards the equator, the fluid would there rise and swell most; and, that its figure really should be so now, seems necessary, to keep the sea in the equinoctial regions from overflowing the earth about those parts. See this curious subject well treated by Huygens, in his discourse De Causâ Gravitatis, p. 154, where he states the ratio of the polar diameter to that of the equator, as 577 to 578. And Newton, in his Principia, first published in 1686, demonstrates from the theory of gravity, that the figure of the earth must be that of an oblate spheroid, generated by the rotation of an ellipse about its shortest diameter, provided all the parts of the earth were of a uniform density throughout; and that the proportion of the polar to the equatorial diameter of the earth, would be that of 689 to 692, or nearly that of 229, to 230, or as ·9956522 to 1. This proportion of the two diameters was calculated by Newton in the following manner: having found that the centrifugal force at the equator is $\frac{1}{289}$ of gravity, he assumes, as an hypothesis, that the earth is to the diameter of the equator as 100 to 101, and thence determines what must be the centrifugal force at the equator to give the earth such a form, and finds it to be $\frac{1}{303}$ of gravity: then, by proportion, if a centrifugal force equal to $\frac{1}{289}$ of gravity would make the earth higher at the equator than at the poles by $\frac{1}{108}$ of the whole height at the poles, a centrifugal force that is $\frac{1}{289}$ of gravity will make it higher by a proportional excess, which by calculation is $\frac{1}{229}$ of the height at the poles; and thus he discovered, that the diameter at the equator is to the diameter at the poles, or the axis, as 230 to 229. But this computation supposes the earth to be every where of a uniform density; whereas if the earth is more dense near the centre, then bodies at the poles will be more attracted by this additional matter being nearer; and therefore the excess of the semi-diameter of the equator above the semi-axis, will be different. According to this proportion between the two diameters, Newton farther computes, from the different measures of a degree, that the equatorial diameter will exceed the polar by thirty-four miles and $\frac{1}{2}$. Nevertheless, Messrs. Cassini, both father and son, the one in 1701, and the other in 1713, attempted to prove, in the Memoirs of the Royal Academy of Sciences, that the earth was an oblong spheroid: and in 1718, M. Cassini again undertook, from observations, to show that, on the contrary, the longest diameter passes through the poles; which gave occasion for Mr. John Bernouilli, in his Essai d'une Nouvelle Physique Celeste, printed at Paris in 1735, to triumph over the British philosopher, apprehending that these observations would invalidate what Newton had demonstrated. And in 1720 M. De Mairan advanced arguments, supposed to be strengthened by geometrical demonstrations, farther to confirm the assertions of Cassini. But in 1735 two companies of mathematicians were employed, one for a northern, and another for a southern expedition,

the result of whose observations and measurement plainly proved that the earth was flatted at the poles. The proportion of the equatorial diameter to the polar, as stated by the gentlemen employed on the northern expedition for measuring a degree of the meridian, is as 1 to 0·9891; by the Spanish mathematicians as 266 to 265, or as 1 to 0·99624: by M. Bouguer as 179 to 178, or as 1 to 0·99441. As to all conclusions, however, deduced from the length of pendulums in different places, it is to be observed, that they proceed upon the supposition of the uniform density of the earth, which is a very improbable circumstance; as justly observed by Dr. Horsley in his letter to captain Phipps: 'you finish your article, he concludes, relating to the pendulum with saying, 'that these observations give a figure of the earth nearer to Sir Isaac Newton's computation, than any others that have hitherto been made;' and then you state the several figures given, as you imagine, by former observations, and by your own. Now it is very true, that, if the meridians be ellipses, or if the figure of the earth be that of a spheroid generated by the revolution of an ellipsis, turning on its shorter axis, the particular figure, or the ellipticity of the generating ellipsis, which your observations give, is nearer to what Sir Isaac Newton saith it should be, if the globe were homogeneous, than any that can be derived from former observations. But yet it is not what you imagine. Taking the gain of the pendulum in latitude 79° 50′ exactly as you state it, the difference between the equatorial and the polar diameter is about as much less than the Newtonian computation makes it, and the hypothesis of homogeneity would require, as you reckon it, to be greater. The proportion of 212 to 211 should indeed, according to your observations, be the proportion of the force that acts upon the pendulum at the poles to the force acting upon it at the equator. But this is by no means the same with the proportion of the equatorial diameter to the polar. If the globe were homogeneous the equatorial diameter would exceed the polar by $\frac{1}{230}$ of the length of the latter: and the polar force would also exceed the equatorial by the like part. But, if the difference between the polar and equatorial force be greater than $\frac{1}{230}$ (which may be the case in an heterogeneous globe, and seems to be the case in ours), then the difference of the diameters should, according to theory, be less than $\frac{1}{230}$, and vice versa. I confess this is by no means obvious, at first sight; so far otherwise, that the mistake, which you have fallen into, was once very general. Many of the best mathematicians were misled by too implicit a reliance upon the authority of Newton, who had certainly confined his investigations to the homogeneous spheroid, and had thought about the heterogeneous only in a loose and general way. The late Mr. Clairault was the first who set the matter right, in his elegant and subtle treatise on the figure of the earth. That work has now been many years in the hands of mathematicians, among whom I imagine there are none, who have considered the subject attentively, that do not acquiesce in the author's conclusions. In the second part of that treatise, it is proved, that putting P for the polar force, Π for the equatorial, δ for the true ellipticity of the earth's figure, and for the ellipticity of the homogeneous spheroid,

$$\frac{P-\Pi}{\Pi} = 2\varepsilon - \delta: \text{ therefore } \delta = 2\varepsilon - \frac{P-\Pi}{\Pi}$$

and, therefore, according to your observation, $\delta = \frac{1}{231}$. This is the just conclusion from your observations of the pendulum, taking it for granted that the meridians are ellipses: which is an hypothesis upon which all the reasonings of theory have hitherto proceeded. But, plausible as it may seem, I must say that there is much reason from experiment to call it in question. If it were true, the increment of the force which actuates the pendulum as we approach the poles, should be as the square of the sine of the latitude: or, which is the same thing, the decrement, as we approach the equator, should be as the square of the cosine of the latitude. But whoever takes the pains to compare together such of the observations of the pendulum in different latitudes, as seem to have been made with the greatest care, will find that the increments and decrements do by no means follow these proportions; and, in those which I have examined, I find a regularity in the deviation which little resembles the mere error of observation. The unavoidable conclusion is, that the true figure of the meridians is not elliptical. If the meridians are not ellipses, the difference of the diameters may indeed, or it may not, be proportioned to the difference between the polar and the equatorial force; but it is quite an uncertainty, what relation subsists between the one quantity and the other; our whole theory, except so far as it relates to the homogeneous spheroid, is built upon false assumptions, and there is no saying what figure of the earth any observations of the pendulum give.' Dr. Horsley then lays down the following table, which shows the different results of observations made in different latitudes; in which the first three columns contain the names of the observers, the places of observation, and the latitude of each; the fourth column shows the quantity of P — Π in such parts as Π is 100,000, as deduced from comparing the length of the pendulum, at each place of observation, with the length of the equatorial pendulum as termed by M. Bouguer, upon the supposition that the increments and decrements of force, as the latitude is increased or lowered, observe the proportion which theory assigns. Only the second and the last value of P — Π are concluded from comparisons with the pendulum at Greenwich and at London, not at the equator. The fifth column shows the value of δ corresponding to every value of P — Π, according to Clairault's theorem:

Observers.	Places.	Lat.	P—Π.	δ
Bouguer	Equator	0° 0′		
Bouguer	Porto Bello	9 34	741·8	$\frac{1}{764}$
Green	Otaheitee	17 29	563·2	$\frac{1}{326}$
Bouguer	San Domingo	18 27	591·0	$\frac{1}{338}$
Abbé de La Caille	Cape of Good Hope	33 55	731·5	
- - - - -	Paris	48 50	585·1	$\frac{1}{331}$
The Academicians	Pello	66 48	565·9	$\frac{1}{329}$
Capt. Phipps	- - - - -	79 50	471·2	$\frac{1}{231}$

'By this table it appears, that the observations in the middle parts of the globe, setting aside the single one at the Cape, are as consistent as could reasonably be expected; and they represent the ellipticity of the earth as about $\frac{1}{310}$. But when we come within ten degrees of the equator, it should seem that the force of gravity suddenly becomes much less, and within the like distance of the poles much greater than it could be in such a spheroid.' The following problem communicated by Dr. Leatherland to Dr. Pemberton, and published by Mr. Robertson, serves to find the proportion between the axis and the equatorial diameter, from measures of a degree of the meridian in two different latitudes, supposing the earth an oblate spheroid. Let A P*ap* (*Pl.* 124, fig. 1.) be an ellipse representing a section of the earth through the axis P*p*; the equatorial diameter, or the greater axis of the ellipse, being A*a*; let E and F be two places, where the measure of a degree has been taken; these measures are proportional to the radii of curvature in the ellipse at those places; and if C Q, C R, be conjugates to the diameters whose vertices are E and F, C Q will be to C R in the subtriplicated ratio of the radius of curvature at E to that at F, by Cor. 1, Prop. 4, part 6, of Milnes's Conic Sections, and therefore in a given ratio to one another; also the angles Q C P, R C P, are the latitudes of E and F; so that, drawing Q V parallel to P*p*, Q X Y W to A*a*, these angles being given, as well as the ratio of C Q to C R, the rectilinear figure C V Q X R Y is given in species; and the ratio of $VC^2 - ZC^2$ ($= QX \times XW$) to $RZ^2 - QV^2 = (RX \times XS)$ is given, which is the ratio of CA^2 to CP^2; therefore the ratio of C A to C P is given. Hence, if the sine and cosine of the greater latitude be each augmented in the subtriplicate ratio of the measure of the degree in the greater latitude to that in the lesser, then the difference of the squares of the augmented sine, and the sine of the lesser latitude, will be to the difference of the squares of the cosine of the lesser latitude, and the augmented cosine, in the duplicate ratio of the equatorial to the polar diameter. For C*q* being taken in C Q equal to C R, and *q v* drawn parallel to Q V, C*v*, and *vq*, C Z and Z R will be the sines and cosines of the respective latitudes to the same radius; and C V, V Q, will be the augmentations of C*v* and C*q* in the ratio named. Hence, to find the ratio between the two axes of the earth, let E denote the greater, and F the lesser of the two latitudes, M and N the respective measures taken in each; and

let P denote $\sqrt[3]{\frac{M}{N}}$: then

$$\sqrt{\frac{\cos.^2 F - P^2 \times \cos.^2 E}{P^2 \times \sin.^2 E - \sin.^2 F}} \text{ is } = \frac{\text{less axis}}{\text{greater axis}}$$

It also appears from the above problem, that when one of the degrees measured is at the equator, the cosine of the latitude of the other being augmented in the subtriplicate ratio of the degrees, the tangent of the latitude will be to the tangent answering to the augmented cosine,' in the ratio of the greater axis to the less. For, supposing E the place out of the equator, then, if the semi-circle P*lmnp* be described, and *l*C joined, and *mo* drawn parallel to *a*C: C*o* is the cosine of the latitude to the radius C P, and C Y that cosine augmented in the ratio before named; Y Q being to Y*l*, that is, C*a* to C*n*, or C P, as the tangent of the angle Y C Q, the latitude of the point E to the tangent of the angle Y C*l* belonging to the augmented cosine. Thus, if M represent the measure in a latitude denoted by E, and N the measure at the equator, let A denote an angle whose measure is

cos. Ex^3 $\sqrt{\frac{M}{N}}$ Then $\frac{\text{tan. A}}{\text{tan. E}}$ is $= \frac{\text{less axis}}{\text{greater axis}}$

But M, or the length of a degree, obtained by actual mensuration in different latitudes, is known from the following table:—

Name.	Lat.	Value of M.
		Toises.
Maupertuis, &c.	66° 20′	M = 57438
Cassini and La Caille	49 22	M = 57074
	45 00	M = 57050
Boscovich	43 00	M = 56972
De la Caille	33 18	M = 57037
Juan and Ulloa	at the equator.	M = 56768
Bouguer		M = 56753
Condamine		M = 56749

Now, by comparing the first with each of the following ones; the second with each of the following; and in like manner the third, fourth, and fifth, with each of the following; there will be obtained twenty-five results, each showing the relation of the axes or diameters; the arithmetical means of all of which will give that ratio as 1 to 0·9951989. If the measures of the latitude of 49° 22′, and of 45° which fall within the meridian line drawn through France, and which have been re-examined and corrected since the northern and southern expedition, be compared with those of Maupertuis and his associates in the north, and that of Bouguer at the equator, there will result six different values of the ratio of the two axes: the arithmetical mean of all which, is that of 1 to 0·9953467, which may be considered as the ratio of the greater axis to the less: which is as 230 to 228·92974, or 215 to 214, or very near the ratio as assigned by Newton. Now the magnitude, as well as the figure of the earth, that is, the polar and equatorial diameters, may be deduced from the foregoing problem. For, as half the latus rectum of the greater axis A*a* is the radius of curvature at A, it is given in magnitude from the degree measured there, and thence the axes themselves are given. Thus, the circular arc whose length is equal to the radius being 57·29578 degrees, if this number be multiplied by 56750 toises, the measure of a degree at the equator, as Bouguer has stated it, the product will be the radius of curvature there, or half the latus rectum of the greater axis; and this is to half the less axis in the ratio of the less axis to the greater, that is, as 0·9953467 to 1; whence the two axes are 6533820 and 6564366 toises, or 7913 and 7950 English miles: and the differences between the two axes about thirty-seven miles. See Robertson's Navi-

gation, vol. ii. p. 206, &c. Suite des Mem. de l'Acad. 1718, p. 247, and Maclaurin's Fluxions vol. II. book i. chap. xiv. And very nearly the same ratio is deduced from the lengths of pendulums vibrating in the same time, in different latitudes; provided it be again allowed, that the meridians are real ellipses, or the earth a true spheroid, which, however, can only take place in the case of a uniform gravity in all parts of the earth. Thus, in the new Petersburgh Acts, for 1788 and 1789, are accounts and calculations of experiments relative to this subject, by M. Krafft. These experiments were made at different times and in various parts of the Russian empire. This gentleman has collected and compared them, and drawn the proper conclusions from them: thus, he infers, that the length x of a pendulum that swings seconds in any given latitude λ, and in a temperature of 10° of Reaumur's thermometer may be determined by this equation:

$x = 439{\cdot}178 + 2{\cdot}321 \sin^2\lambda$, lines of a French foot,

or $x = 39{\cdot}0045 + 0{\cdot}206 \sin^2\lambda$, in English inches, in the temperature of 53 of Fahrenheit's thermometer. This expression nearly agrees, not only with all the experiments made on the pendulum in Russia, but also with those of Mr. Graham in England, and those of Mr. Lyons in 79° 50′ N. lat., where he found its length to be 431·38 lines. It also shows the augmentation of gravity from the equator to the parallel of a given latitude λ: for, putting g for the gravity under the equator, G for that under the pole, and y for that under the latitude λ, M. Krafft finds $y = (1 + 0{\cdot}0052848 \sin^2\lambda)\, g$; and therefore $G = 1{\cdot}0052848\, g$. From this proportion of gravity under different latitudes, the same author infers, that, in case the earth is a homogeneous ellipsoid, its oblateness must be $\frac{1}{191}$, instead of $\frac{1}{230}$; which ought to be the result of this hypothesis; but on the supposition that the earth is a heterogeneous ellipsoid, he finds its oblateness, as deduced from these experiments, to be $\frac{1}{297}$; which agrees with that resulting from the measurement of some of the degrees of the meridian. This confirms an observation of M. De la Place, that if the hypothesis of the earth's homogeneity be given up, then the theory, the measurement of degrees of latitude, and experiments with the pendulum, all agree in their result with respect to the oblateness of the earth. See Memoires de l'Acad. 1783, p. 17. In the Philos. Trans. for 1791, p. 236, Mr. Dalby has given some calculations on measured degrees of the meridian, from whence he infers, that those degrees measured in middle latitudes, will answer nearly to an ellipsoid whose axes are in the ratio assigned by Newton, viz. that of 230 to 229. And as to the deviations of some of the others, viz. towards the poles and equator, he thinks they are caused by the errors in the observed celestial arcs.

The *cosmogony*, or knowledge of the original formation of the earth, the materials of which it was composed, and by what means they were disposed in the order in which we see them, is a subject, which, though perhaps beyond the reach of human sagacity, has exercised the ingenuity of philosophers in all ages. To enter into the various theories that have been formed upon this subject, would, however, not only swell this article beyond our bounds, but be fatiguing to many readers. As far as human industry has hitherto penetrated, it has been found that the substances of which the earth is composed are neither ranged in a regular series, according to their specific gravities, nor yet thrown together in total disorder, as if by accident or chance. But the depth of the earth, from the surface to the centre, is nearly 4000 miles; and yet the deepest mine in Europe, that at Cotteberg, in Hungary, is not more than 1000 yards deep; so that little is as yet known of its interior parts. From what has been discovered, however, of those parts which lie most contiguous to our observation, naturalists have compared the structure of the earth to the coats of an onion, or the leaves of a book. And indeed, except in some of those immense mountains which have existed from the creation, or at least from the deluge, where the matter, from whatever cause, is more homogeneous, the earth is found to consist of various strata or layers, which differ according to the circumstances of climate and situation. The surface generally consists of a confused mixture of decayed animal and vegetable substances and earths rudely united together but, upon digging below this surface, the materials of the globe are found arranged in a more regular manner. Heaps of stone are indeed frequently found, which do not consist of layers, but are confused masses of unequal thickness and are called rocks. The strata are generally extended through a whole country, and perhaps, with some interruptions and varieties, through the globe itself. When the country is flat, these extensive bodies are found most regular, being in that case nearly parallel to the horizon, though often dipping downwards in a certain angle; in many places the beds have a wave, as where the country consists of gently waving hills and vales; and here also they in general dip. In passing over the ground the soil is found, perhaps to the extent of a mile, mostly composed of sand; and perhaps for another it consists chiefly of clay: which is occasioned by the edges of the different strata lying with an obliquity to the horizon. By a similar projection, mountains, or ridges of mountains, are produced which commonly have what is called a back and a face, the former smoother, and the latter more rugged. It is generally found, also, that the ascent is more gradual on the one side of a mountain than on the other; and this is occasioned by the strata, which have risen above the general level of the country, being abruptly broken off. The order, number, situation with respect to the horizon, depth, intersections, fissures, color, consistence, &c., of these strata have been considered by Dr. Woodward with great attention. The origin and formation of them all is ascribed by him to the deluge. He supposes that, at that dreadful revolution, all sorts of terrestrial bodies had been dissolved and mixed with the waters, forming altogether, a chaos or confused mass; and he also supposes, that this mass of terrestrial particles, intermixed with water, was at length precipitated to the bottom; and that, in general, according to the order of gravity, the

heaviest sunk first, and the lighter afterwards. Thus were the strata formed of which the earth consists; which, gradually attaining their solidity and hardness, have ever since continued distinct. The Doctor farther observes, that these sediments were at first all parallel and concentrical; and the surface of the earth formed of them perfectly smooth and regular; but that, in course of time, divers changes happening, from earthquakes, volcanoes, &c., the order and regularity of the strata were disturbed and broken, and thus was the surface of the earth brought to the irregular form in which it is now beheld.

The notion of the *magnetism* of the earth was started by Gilbert; and Boyle supposes magnetic effluvia moved from one pole to the other. Vol. I. p. 285, 290. Dr. Knight also thinks that the earth may be considered as a great loadstone, whose magnetical parts are disposed in a very strong irregular manner; and that the south pole of the earth is analogous to the north pole in magnets, that is, the pole by which the magnetical stream enters. See MAGNET. He observes that all the phenomena attending the direction of the needle, in different parts of the earth, in a great measure correspond with what happens to the needle, when placed upon a large terrella; if we make allowances for the different dispositions of the magnetical parts, with respect to each other, and consider the south pole of the earth as a north pole with regard to magnetism. The earth might become magnetical by the iron ores it contains, for all iron ores are capable of magnetism. The globe might, notwithstanding, have remained unmagnetical, unless some cause had existed capable of making that repellent matter producing magnetism move in a stream through the earth. Now, the doctor thinks that such a cause does exist; for, if the earth revolves round the sun in an ellipsis, and the south pole of the earth is directed towards the sun, at the time of its descent towards it, a stream of repellent matter will thence be made to enter at the south pole, and issue out at the north. And he suggests, that the earth's being in its perihelion in winter may be one reason why magnetism is stronger in this season than in summer. This cause for the earth's magnetism must continue, and perhaps improve it from year to year. Hence, the doctor thinks it probable, that the earth's magnetism has been improving ever since the creation, and that this may be one reason why the use of the compass was not discovered sooner. See Dr. Knight's *Attempt to Demonstrate*, that all the phenomena in nature may be explained by Attraction and Repulsion, prop. 87.

The *magnitude* of the earth has been variously determined by different authors, both ancient and modern. The usual way has been to measure the length of one degree of the meridian, and multiply it by 360 for the whole circumference. See DEGREE. Diogenes Laertius informs us that Anaximander, who lived about A.A.C. 550, was the first who gave an account of the circumference of the sea and land; and it seems his measure was used by the succeeding mathematicians till the time of Eratosthenes. Aristotle (lib. 2. De Cœlo) says, the mathematicians who have attempted to measure the circuit of the earth make it 40,000 stadia: which it is thought is the number determined by Anaximander. Eratosthenes, who lived about A.A.C. 200, was the next who undertook this business: which, as Cleomedes relates, he performed by taking the sun's zenith distances, and measuring the distance between two places under the same meridian; by which he deduced for the whole circuit about 250,000 stadia, which Pliny states at 31,500 Roman miles, reckoning each at 1000 paces. But this measure was accounted false by many of the ancient mathematicians, and particularly by Hipparchus, who lived 100 years afterwards, and who added 25,000 stadia to the circuit of Eratosthenes. Possidonius, in the time of Cicero, next measured the earth, viz. by the altitudes of a star, and measuring a part of a meridian; and he concluded the circumference at 240,000 stadia, according to Cleomedes, but only at 180,000 according to Strabo. Ptolemy, in his Geography, says that Marinus, a celebrated geographer, attempted something of the same kind; and, in lib. i. cap. 3, he mentions, that he himself had tried to perform the business in a way different from any other before him, which was by means of places under different meridians; but he does not say how much he made the number, for he still made use of the 180,000 which had been found out before him. Snell, professor of mathematics at Leyden, relates, from the Arabian geographer Abulfeda, who lived about A.D. 1300, that about A.D. 800 Al Maimon, an Arabian king, having collected together some skilful mathematicians, commanded them to find out the circumference of the earth. Accordingly they chose the fields of Mesopotamia, where they measured under the same meridian from north to south, till the pole was depressed one degree lower; which measure they found equal to fifty-six miles, or fifty-six and a half; so that, according to them, the circuit of the earth is 20,160 or 20,340 miles. It was long after this before any more attempts were made. At length, however, the same professor Snell, about A.D. 1620, with great skill and labor, by measuring large distances between two parallels, found one degree equal to 28,500 perches, each of which is twelve Rhinland feet, amounting to nineteen Dutch miles, and so the whole periphery 6840 miles; a mile being, according to him, 1500 perches, or 18,000 Rhinland feet. See his Eratosthenes Batavus. The next who undertook this measurement was Norwood, who, in 1635, by measuring the distance from London to York with a chain, and taking the sun's meridian altitude, June 11th, O.S., with a sextant of about five feet radius, found a degree contained 367,200 feet, or sixty-nine miles and a half and fourteen poles; and thence the circumference of a great circle of the earth is a little more than 25,036 miles, and the diameter a little more than 7966 miles. See the particulars in his Seaman's Practice. Professor Snell's measurement, though very ingenious, and much more accurate than any of the ancients, being still thought liable to small errors, the business was renewed, after Snell's manner, by Picard and other French mathematicians, by the king's command, using a quadrant of 3½ French feet ra-

dius; by which they found a degree contained 342,360 French feet. See Mesure de la Terre, par Picard. M. Cassini, jun. in 1700, renewed the business with a quadrant of ten feet radius for taking the latitude, and another of 3½ feet for taking the angles of the triangles; and found a degree, from his calculation, containing 57,292 toises, or almost sixty-nine and a half English miles. The results of many other measurements are upon record; from the mean of all which, the following dimensions are stated by Dr. Hutton as near the truth. The circumference 25,000 miles; the diameter 7957¾ miles; the superficies 198,944,206 square miles; the solidity 263,930,000,000 cubic miles. The seas and unknown parts of the earth, by a measurement of the best maps, contain 160,522,026 square miles; the inhabited parts 38,922,180; of which Europe contains 4,456,065; Asia, 10,768,823; Africa, 9,654,807; and America, 14,110,874.

Tacquet draws some curious inferences, in the form of paradoxes, from the round figure of the earth: as, 1. That if any part of the surface of the earth were quite plane, a man could no more walk upright upon it, than on the side of a mountain. 2. That the traveller's head goes a greater space than his feet; and a horseman than a footman, as moving in a greater circle. 3. That a vessel, full of water, being raised perpendicularly, some of the water will be continually flowing out, yet the vessel still remain full; and, on the contrary, if a vessel of water be let perpendicularly down, though nothing flow out, yet it will cease to be full: consequently, there is more water contained in the same vessel at the foot of a mountain than on the top; because the surface of the water is compressed into a segment of a smaller sphere below than above. *Tacquet's Astronomie*, lib. i. cap. 2.

Earths, in chemistry, are such bodies as possess the following properties: insoluble in water or nearly so; at least becoming insoluble when combined with carbonic acid: little or no taste or smell; at least, when combined with carbonic acid: fixed, incombustible, and incapable, while pure, of being altered by the fire; not altered when heated by combustibles: not convertible into metals by all the ordinary methods of reduction, or, when reduced by scientific refinements, possessing but an evanescent metallic existence.

Bodies possessing these qualities were ranked, till lately, among the unreducible elements, and the following nine were classified under this belief. 1. Barytes. 2. Strontites. 3. Lime. 4. Magnesia. 5. Alumina, or clay. 6. Silica. 7. Glucina. 8. Zirconia. 9. Yttria. To the above nine earthy substances, Berzelius has added a tenth, which he calls thorina.

But the brilliant discovery by Sir H. Davy, in 1808, of the metallic bases of potassa, soda, barytes, strontites, and lime, subverted the ancient ideas regarding the earths, and taught us to regard them as all belonging, by most probable analogies, to the metallic class. See Chemistry and Metals.

Earth Flax. See Amianthus.

Earth-House. See Architecture, Index.

Earth Nuts, or Ground Nuts. See Arachis and Ground Nuts.

Earth Nuts, or Pig Nuts. See Bunium.

Earth Pucerons. See Puceron.

An Earthquake is a sudden and violent concussion of the earth, generally accompanied with strange noises under ground, or in the air; often destroying whole cities at once, throwing down rocks, altering the course of rivers, and producing the most terrible devastations. Though there is hardly any country known, in which shocks of an earthquake have not at some time or other been felt, yet there are some much more subject to them than others. Northern countries, in general, are less subject to earthquakes than those situated near the equator, or in the southern latitudes; but this does not hold universally. The islands of Japan, which are situated pretty far north, are nevertheless, exceedingly liable to these dreadful convulsions. Islands, in general, are also more subject to them than continents; but neither does this' hold without exceptions. Particular parts of continents, and particular islands, are more subject to them than others lying in the neighbourhood, and differing little from them in external appearance. Portugal is more subject to earthquakes than Spain, and the latter much more than France; Mexico and Peru more than the other countries of America, and Jamaica more than the other Caribbee islands. Earthquakes are frequent, though not often violent, in Italy; but in Sicily they are often terribly destructive. Asia Minor has been remarkably subject to them from the remotest antiquity; and the city of Antioch in particular has suffered more from earthquakes than any other in that country. The same phenomena are said also to occur very frequently in the extremities of Asia, even in very high latitudes.

Although no natural phenomenon is more calculated to impress the human mind with terror, and consequently to be well remembered and taken notice of, than an earthquake, yet the philosophy of them is but lately arrived at any degree of perfection; and, even at this day, the history of earthquakes is incomplete. The destruction occasioned by them engrosses the mind too much to admit of philosophical speculations at the time they happen; the same thing prevents the attentive consideration of the alterations that take place in the atmosphere after the earthquake is over, and which might probably throw some light on the causes which produced it; and the suddenness of its coming on prevents an exact attention to those slight appearances in the earth or air which, if carefully observed, might serve as warnings to avoid the destruction. From the observations that have been made, however, the following phenomena may be deduced, and reckoned pretty certain. 1. Where there are any volcanoes or burning mountains, an earthquake may reasonably be expected more frequently than in other countries. 2. If the volcano has been long quiet, a violent earthquake is to be feared, and vice versa. But to this there are many exceptions. 3. Earthquakes are generally preceded by long droughts, but they do not always come on as soon as the drought ceases. 4. They are also preceded by electrical

appearances in the air; such are the aurora borealis, falling stars, &c.; but this does not hold universally. 5. A short time before the shock, the sea swells up and makes a great noise; fountains are troubled, and send forth muddy water; and the beasts seem frighted, as if sensible of an approaching calamity. 6. The air at the time of the shock is generally calm and serene; but afterwards commonly becomes obscure and cloudy. 7. The shock comes on with a rumbling noise, sometimes like that of carriages; sometimes a rushing noise like wind, and sometimes explosions, like the firing of cannon, are heard. Sometimes the ground heaves perpendicularly upwards, and sometimes rolls from side to side. Sometimes the shock begins with a perpendicular heave, after which the other kind of motion commences. A single shock is but of very short duration, the longest scarcely lasting a minute; but they frequently succeed each other at short intervals for a considerable length of time. 8. During the shock, chasms are made in the earth; from which sometimes flames, but oftener great quantities of water, are discharged. Flame and smoke are also emitted from places of the earth where no chasms can be perceived. Sometimes these chasms are but small; but, in violent earthquakes, they are often so large, that whole cities sink down into them at once. 9. The water of the ocean is affected even more than the dry land. The sea swells up to a prodigious height; much more than we could suppose it raised by the mere elevation of its bottom by the shock. Sometimes it is divided to a considerable depth, and great quantities of air, flames, and smoke, are discharged from it. The same irregular agitations happen to the waters of ponds, lakes, and even rivers. 10. The shock is felt at sea as well as on land. Ships are affected by a sudden stroke, as if they had run aground or struck upon a rock. 11. The effects of earthquakes are not confined to one particular district or country, but often extend to very distant regions; though no earthquake has yet been known extensive enough to affect the whole globe at one time In those places also where the shock is not felt on dry land, the irregular agitation of the waters above mentioned, is perceived very remarkably. All these positions are verified by the account of those earthquakes which have been particularly described by witnesses of the best character.

A terrible earthquake happened at Calabria in 1638, which affords an exception to the second general position above laid down. In Italy there had been an eruption of Mount Vesuvius five years before; and in Sicily there had been an eruption of Ætna only two years before this earthquake The event, however, plainly showed that the cause of the earthquake, whatever it was, had a connexion not only with Mount Ætna, which lies in the neighbourhood, but also with the volcano of Stromboli, which is sixty miles distant. 'On the 24th of March,' says Kircher, 'we launched, in a small boat, from the harbour of Messina, in Sicily, and arrived the same day at the promontory of Pelorus. Our destination was for the city of Euphemia, in Calabria; but, on account of the weather, we were obliged to continue three days at Pelorus. At length, wearied with the delay, we resolved to prosecute our voyage; and, although the sea seemed more than usually agitated, yet we ventured forward. The gulf of Charybdis, which we approached, seemed whirled round in such a manner as to form a vast hollow, verging to a point in the centre. Proceeding onward, and turning my eyes to Mount Ætna, I saw it cast forth large volumes of smoke, of mountainous size, which entirely covered the island, and blotted out even the shores from my view. This, together with the dreadful noise, and the sulphurous stench, which was strongly perceived, filled me with apprehensions that some more dreadful calamity was impending. The sea itself seemed to wear a very unusual appearance; those who have seen a lake in a violent shower of rain, all covered over with bubbles, will have some idea of its agitations. My surprise was still increased by the calmness and serenity of the weather; not a breeze, not a cloud, which might be supposed to put all nature thus into motion. I therefore warned my companion that an earthquake was approaching; and, after some time, making for the shore with all possible diligence, we landed at Tropæa. But we had scarcely arrived at the Jesuits' college in that city, when our ears were stunned with a horrid sound, resembling that of an infinite number of chariots driven fiercely forward, the wheels rattling, and the thongs cracking. Soon after this, a most dreadful earthquake ensued, so that the whole tract upon which we stood seemed to vibrate, as if we were in the scale of a balance that continued waving. This motion, however, soon grew more violent; and, being no longer able to keep my legs, I was thrown prostrate upon the ground. After some time, finding that I remained unhurt amidst the general concussion, I resolved to venture for safety, and running as fast as I could, reached the shore. I did not search long here, till I found the boat in which I had landed, and my companions also. Leaving this seat of desolation, we prosecuted our voyage along the coast; and the next day came to Rochetta, where we landed, although the earth still continued in violent agitations. But we were scarcely arrived at our inn, when we were once more obliged to return to our boat; and in about half an hour we saw the greatest part of the town, and the inn in which we had set up, dashed to the ground, and burying all its inhabitants beneath its ruins. Proceeding onward in our little vessel, we at length landed at Lopizium, a castle midway between Tropæa and Euphemia, the city to which we were bound. Here, wherever I turned my eyes, nothing but scenes of ruin and horror appeared; towns and castles levelled to the ground; Stromboli, though at sixty miles distance, belching forth flames in an unusual manner, and with a noise which I could distinctly hear. But my attention was quickly turned from more remote to contiguous danger. The rumbling sound of an approaching earthquake, which by this time we were grown acquainted with, alarmed us for the consequences. It every moment seemed to grow louder, and to approach more near. The place on which we stood began to shake most

dreadfully; so that, being unable to stand, my companions and I caught hold of whatever shrub grew next us, and supported ourselves in that manner. After some time, the violent paroxysm ceasing, we again stood up, in order to prosecute our voyage to Euphemia, which lay within sight. In the mean time, while we were preparing for this purpose, I turned my eyes towards the city, but could see only a frightfully dark cloud, that seemed to rest upon the place. This the more surprised us, as the weather was so very serene. We waited, therefore, till the cloud was passed: then turning to look for the city, it was totally sunk, and nothing but a dismal and putrid lake was to be seen where it stood.'

In the year 1692 an earthquake happened in Jamaica, attended with almost all the terrible phenomena above stated. In two minutes it destroyed the town of Port Royal, and sunk the houses in a gulf of forty fathoms deep. It was attended with a hollow rumbling noise, like that of thunder: the streets rose like the waves of the sea, first lifting up the houses, and then immediately throwing them down into deep pits. All the wells discharged their waters with the most violent agitation. The sea burst over its bounds, and deluged all that stood in its way. The fissures of the earth were in some places so great, that one of the streets appeared twice as broad as formerly. In many places it opened and closed again, and continued this agitation for some time. Of these openings great numbers might be seen at one time. In some the people were swallowed up at once; in others, the earth caught them by the middle, and crushed them to death, while others, more fortunate, were swallowed up in one chasm, and thrown out alive from another. Other chasms were large enough to swallow up whole streets; and others, still more formidable, spouted up immense quantities of water, drowning such as the earthquake had spared. The whole was attended with stenches and offensive smells, the noise of falling mountains at a distance, &c.; and the sky suddenly turned dull and reddish, like a glowing oven. Yet, greatly as Port Royal suffered, more houses were left standing in it, than on the whole island besides. Scarcely a planting-house, or sugar-house, was left standing in all Jamaica. A great part of them were swallowed up, houses, people, trees, and all in one gap: in lieu of which, afterwards appeared great pools of water; which, when dried up, left nothing but sand, without any mark that ever tree or plant had grown thereon. Although the shock was so violent, that several houses were thrown some yards out of their places, yet they continued standing. A Mr. Hopkins had his plantation removed half a mile from the place where it stood, without any considerable alteration. All the wells in the island, as well as those of Port Royal, from one fathom to six or seven deep, threw their water out at the top with great violence. Above twelve miles from the sea the earth gaped and spouted out, with a prodigious force, vast quantities of water into the air: yet the greatest violences were among the mountains and rocks; and it is a general opinion, that the nearer the mountains the greater the shock; and that the cause thereof lay among them. Most of the rivers were stopped up for twenty-four hours, by the falling of the mountains; till, swelling up, they formed new channels, tearing up, in their passage, trees, &c. After the great shock, those people who escaped got on board ships in the harbour, where many continued above two months: the shocks all that time being so violent, and coming so thick, sometimes two or three in an hour, accompanied with frighful noises, like a rushing wind, or a hollow rumbling thunder, with brimstone blasts, that they durst not come ashore. The consequence of the earthquake was a general sickness, from the noisome vapors belched forth, which swept away above 3000 people.

In 1693 an earthquake happened in Sicily, which may justly be accounted one of the most terrible of which we have any account. It shook the whole island, and even Naples and Malta shared in the shock. It was impossible for any body in this country to keep on their legs on the dancing earth; nay, those that lay on the ground were tossed from side to side, as on a rolling billow: high walls leaped from their foundations several paces, &c. The mischief it did is amazing; almost all the buildings in the countries were thrown down; fifty-four cities and towns, besides an incredible number of villages, were either destroyed or greatly damaged. Catania, one of the most famous, ancient, and flourishing cities in the kingdom, had the greatest share in the tragedy. Anthony Serrovita, being on his way thither, at the distance of a few miles, observed a black cloud, like night, hovering over the city, when there arose from the mouth of Mont Gibello great spires of flame, which spread all around. The sea all of a sudden began to roar and rise in billows; and there was a blow as if all the artillery in the world had been at once discharged. The birds flew about, the cattle ran crying, and the horses stopped short, trembling; so that he and his companions were forced to alight. They were no sooner off, but they were lifted from the ground above two palms; when looking towards Catania, he with amazement saw nothing but a thick cloud of dust in the air. Of that magnificent city, there was not the least footstep to be seen. S. Bonajutus assures us, that of 18,900 inhabitants, 18,000 perished therein.

The great earthquake, however, which happened on the 1st of November, 1755, at Lisbon, affords the clearest example of all the phenomena above mentioned, having been felt violently in many places both on land and at sea, and extended its effects to the waters in many other places where the shocks were not perceived. At Lisbon, in Portugal, its effects were most severe. In 1750 there had been a sensible trembling of the earth felt in this city: for four years afterwards there had been an excessive drought: insomuch that some springs, formerly very plentiful of water, were dried, and totally lost. The predominant winds were north and north-east, accompanied with various, though very small, tremors of the earth. The year 1755 proved very wet and rainy; the summer cooler than usual; and for forty days before the earthquake

the weather was clear, but not remarkably so. The 31st of October the sun was obscured, with a remarkable gloominess in the atmosphere. On the 1st of November, early in the morning, a thick fog arose, which was soon dissipated by the heat of the sun: no wind was stirring, the sea was calm, and the weather was as warm as in June or July in Britain. And thirty-five minutes after nine, without the least warning, except a rumbling noise, like the artificial thunder in our theatres, a most dreadful earthquake shook, by quick but short vibrations, the foundations of all the city, so that many buildings instantly fell. Then, with a pause scarcely perceptible, the nature of the motions was changed, and the houses were tossed from side to side, with a motion like that of a waggon violently driven over rough stones. This second shock laid almost the whole city in ruins, with a prodigious slaughter of the people. The earthquake lasted in all about six minutes. At the moment of its beginning, some persons on the river, nearly a mile from the city, heard their boat make a noise as if it had run aground, though they were then in deep water; and at the same time they saw the houses falling on both sides of the river. The bed of the river Tagus was in many places raised to its surface. Ships were driven from their anchors, and jostled together with great violence; nor did their masters know whether they were afloat or aground. A large new quay sunk to an unfathomable depth, with several hundreds of people upon it; nor was one of the dead bodies ever found. The bar was at first seen dry from shore to shore; but suddenly the sea came rolling in like a mountain; and about Belem Castle the water rose fifty feet almost in an instant. About noon there was another shock, when the walls of several houses that yet remained opened from top to bottom more than a quarter of a yard, and afterwards closed again so exactly, that scarce any mark of the injury was left.

At Colares, about twenty-nine miles from Lisbon, and two miles from the sea, on the 31st October the weather was clear, and uncommonly warm for the season. About four o'clock P.M. there arose a fog from the sea, which overspread the valleys, a thing very unusual at that season. Soon after, the wind changing to the east, the fog returned to the sea, collecting itself, and becoming exceedingly thick. As the fog retired, the sea rose with a prodigious roaring. On the 1st November the day broke with a serene sky, the wind continuing at east; but about nine o'clock the sun began to grow dim; and about half an hour after was heard a rumbling noise like that of chariots, which increased to such a degree, that it became equal to the explosions of the largest cannon. Immediately a shock of an earthquake was felt, which was quickly succeeded by a second and third; and at the same time several light flames of fire issued from the mountains, resembling the kindling of charcoal. In these three shocks the walls of the buildings moved from east to west. In another situation, from whence the sea coast could be discovered, there issued from one of the hills called Fojo, a great quantity of smoke, very thick, but not very black. This increased with the fourth shock, and afterwards continued to issue in a greater or less degree. Just as the subterraneous rumblings were heard, the smoke burst forth at the Fojo; and the quantity of smoke was always proportioned to the noise. On visiting the place from whence the smoke was seen to arise, no signs of fire could be perceived near it. At Oporto, near the mouth of the river Douro, the earthquake began about forty minutes past nine. The sky was very serene, when a dreadful hollow noise, like thunder, or the rattling of coaches at a distance, was heard; and almost at the same instant the earth began to shake. In the space of a minute or two the river rose and fell five or six feet, and continued to do so for four hours. It ran up at first with so much violence, that it broke a ship's hawser. In some parts the river opened, and seemed to discharge vast quantities of air: and the agitation in the sea was so great about a league beyond the bar, that air was supposed to have been discharged there also. St. Ube's, a sea-port town about twenty miles south of Lisbon, was entirely swallowed up by the repeated shocks and the vast surf of the sea. Huge pieces of rock were detached at the same time from the promontory at the west end of the town, which consists of a chain of mountains, containing fine jasper of different colors. The same earthquake was felt over all Spain, except in Catalonia, Arragon, and Valencia. At Ayamonte (near where the Guadiana falls into the Bay of Cadiz), a little before ten o'clock, on the 1st November, the earthquake was felt; having been immediately preceded by a hollow rushing noise. Here the shocks continued for fourteen or fifteen minutes, damaged almost all the buildings, throwing down some, and leaving others irreparably shattered. In little more than half an hour after, the sea and river, with all the canals, overflowed their banks with great violence, laying under water all the coasts of the islands adjacent to the city, and flowing into the streets. The water came on in vast black mountains, white with foam at the top, and demolished more than one-half of a tower at the bar, named De Canala. In the adjacent strands every thing was irrecoverably lost; for all that was overflowed sunk, and the beach became a sea, without the least resemblance of what it was before. Many persons perished, for, though they went aboard some vessels, yet part of these foundered; and others being forced out to sea, the unhappy passengers were so terrified, that they threw themselves overboard. The day was serene, and not a breath of wind stirring. At Cadiz, some minutes after 9 A.M. the earthquake began, and lasted about five minutes. The water of the cisterns under ground rushed backwards and forwards, so that a great froth arose. At ten minutes after eleven, a wave was seen coming from the sea, at eight miles distance, at least sixty feet higher than usual. It dashed against the west part of the town, which is very rocky. Though these rocks broke a good deal of its force, it at last came upon the city walls, beat in the breast work, and carried pieces of the building, of eight or ten tons weight, to the distance of forty or fifty yards. When the wave was gone, some parts that are deep at low water were left quite dry, for the water returned

with the same violence with which it came. At half an hour after eleven came a second wave, and after that four other remarkable ones; the first at ten minutes before twelve, the second half an hour before one; the third ten minutes after one; and the fourth ten minutes before two. Similar waves, but smaller, and gradually lessening, continued with uncertain intervals till the evening. At Gibraltar the earthquake was not felt till after ten. It began with a tremulous motion of the earth, which lasted about half a minute. Then followed a violent shock: after that a trembling of the earth for five or six seconds; then another shock not so violent as the first, which went off gradually as it began. The whole lasted about two minutes. Some of the guns on the battery were seen to rise, others to sink, the earth having an undulating motion. Most people were seized with giddiness and sickness, and some fell down; others were stupified: and many that were walking or riding felt no motion in the earth, but were sick. The sea rose six feet every fifteen minutes; and then fell so low, that boats and all the small craft near the shore were left aground, with numbers of small fish The flux and reflux lasted till next morning, having decreased gradually from 2 P.M. At Madrid the earthquake came on at the same time as at Gibraltar, and lasted about six minutes. At first every body thought they were seized with a swimming in their heads; and afterwards that the houses were falling. It was not felt in coaches, nor by those who walked on foot, except very slightly; and no accident happened, except that two lads were killed by the fall of a stone cross from the porch of a church. At Magala a violent shock was felt, the bells rung in the steeples; the water of a well overflowed, and as suddenly retired. Saint Lucar (at the mouth of the Guadalquivir) was violently shocked, and the sea broke in and did much mischief. At Seville (sixteen leagues above) several houses were shaken down; the famous tower of the cathedral, La Giralda, opened in the four sides; and the waters were so violently agitated, that all the vessels in the river were driven ashore.

This earthquake was also felt almost as severely in Africa as it had been in Europe. Great part of Algiers was destroyed. At Arzilla (a town in Fez), about 10 A.M. the sea suddenly rose with such impetuosity, that it lifted up a vessel in the bay, and dropped it with such force on the land, that it was broken to pieces; and a boat was found two musket shot within land from the sea. At Fez and Mequinez, great numbers of houses fell, and multitudes of people were buried in the ruins. At Morocco, by the falling of houses, many people lost their lives: and about eight leagues from the city the earth opened and swallowed up a village with all the inhabitants, who were known by the name of the Sons of Besumba, to the number of about 8000 or 10,000 persons, together with all their cattle, &c., and, soon after, the earth closed again in the same manner as before. At Sallee, a great deal of damage was done. Near a third part of the houses were overthrown; the waters rushed into the city with great rapidity, and left behind them great quantities of fish. At Tangier the earthquake began at 10 A.M. and lasted ten or twelve minutes. The sea came up to the walls (a thing never heard of before), and went down immediately with the same rapidity with which it arose, leaving a great quantity of fish behind it. These commotions were repeated eighteen times, and lasted till 6 P.M. At Tetuan the earthquake began at the same time it did at Tangier, but lasted only seven or eight minutes. There were three shocks so extremely violent, that it was feared the whole city would be destroyed. In the city of Funchal, in the island of Madeira, a shock of this earthquake was first perceived at thirty-eight minutes past 9 A.M. It commenced with a rumbling noise in the air, like that of empty carriages passing hastily over a stone pavement. The observers felt the floor immediately after move with a tremulous motion, vibrating very quickly. The shock continued more than a minute; during which space the vibrations, though continual, were weakened and increased in force twice very sensibly. The increase after the first remission of the shock was the most intense. The noise in the air accompanied the shock during the whole of its continuance, and lasted some seconds after the motion of the earth had ceased; dying away like a peal of distant thunder rolling through the air. At three quarters past ten, the sea, which was quite calm, it being a fine day and no wind stirring, retired suddenly some paces; then rising with a great swell, without the least noise, and as suddenly advancing, overflowed the shore, and entered the city. It rose fifteen feet perpendicular above the high water mark, although the tide, which flows there seven feet, was then at half ebb. The water immediately receded; and after having fluctuated four or five times between high and low water mark, it subsided, and the sea remained calm as before. In the northern part of the island the inundation was more violent, the sea there retiring above 100 paces at first, and suddenly returning, overflowed the shore, forcing open doors, breaking down the walls of several magazines and storehouses, leaving great quantities of fish ashore, and in the streets of the village of Machico. All this was the effect of one rising of the sea, for it never afterwards flowed high enough to reach the high-water mark. It continued, however, to fluctuate here much longer before it subsided than at Funchal; and in some places farther to the westward, it was hardly, if at all, perceptible.

Such were the phenomena with which this remarkable earthquake was attended in those places where it was violent. The effects of it, however, reached to an immense distance; and were perceived chiefly by the agitations of the waters, or some slight motion of the earth. The utmost boundaries of this earthquake to the south are unknown; the barbarity of the African nations rendering it impossible to procure any intelligence from them, except where the effects were dreadful. On the north, however, we are assured, that it reached as far as Norway and Sweden. In the former, the waters of several rivers and lakes were violently agitated. In the latter, shocks were felt in several provinces, and

all the rivers and lakes were strongly agitated, especially in Dalecarlia. The river Dala suddenly overflowed its banks, and as suddenly retired. At the same time a lake three miles distant, which had no communication with it, bubbled up with great violence. At Fahlun, a town in Dalecarlia, several strong shocks were felt.

Shocks of this great earthquake were felt in several places of France: commotions of the waters were observed at Angoulesme, Bleville, Havre de Grace, &c.; but considerable shocks were felt at Bayonne, Bourdeaux, and Lyons. In many places of Germany its effects were also very perceptible, and throughout the duchy of Holstein. In Brandenburg, the water of a lake called Libsec, ebbed and flowed six times in half an hour, with a dreadful noise, the weather being then perfectly calm. The same agitation was observed in the waters of the lakes Muplgast and Netzo; and at this last place they emitted an intolerable stench. In Holland, the agitations were more remarkable. At Alphen on the Rhine, between Leyden and Woerden, in the afternoon of November 1st, the waters were agitated to such a degree, that buoys were broken from their chains, large vessels snapped their cables, smaller ones were thrown out of the water upon the land, and others lying on land were set afloat. At Amsterdam, about 11 A. M., the air being perfectly calm, the waters were suddenly agitated in the canals, so that several boats broke loose; chandeliers were observed to vibrate in the churches; but no motion of the earth, or concussion of any building was observed. At Leyden also, between half an hour after 10 and 11 A. M., the waters rose suddenly in the canals, and made several perceptible undulations. Round the island of Corsica, the sea was violently agitated, and most of the rivers of the island overflowed their banks. Throughout the Milanese, shocks were felt; at Turin there was felt a very violent one, and in Switzerland many rivers turned suddenly muddy without rain. The lake of Neufchatel swelled near two feet above its natural level for a few hours. An agitation was also perceived in the waters of the lake of Zurich. At the island of Antigua, there was such a sea without the bar as had not been known in the memory of man; and after it the water at the wharfs, which used to be six feet deep, was not two inches. At Barbadoes, about 2 P. M. the sea ebbed and flowed in an unusual manner; ran over the wharfs and streets into the houses, and continued thus ebbing and flowing till ten at night.

This agitation of waters was perceived in various parts of Great Britain. At Barlborough, in Derbyshire, between 11 and 12 A. M., in a boat house on the west side of a large body of water called Pibley dam, was heard a surprising and terrible noise; a large swell of water came in a current from the south, and rose two feet on the sloped dam-head at the north end of the water. It then subsided; but returned immediately, though with less violence. The water was thus agitated for three quarters of an hour; growing gradually weaker and weaker every time, till it entirely ceased. At Bushbridge and Cobham in Surry, at Dunstall in Suffolk, in Oxfordshire, Derbyshire, and near the city of Durham, at half after ten in the morning, the like phenomena are recorded to have appeared. At Eyam-bridge, in the Peak of Derby, the overseer of the lead mines, sitting in his writing room about eleven o'clock, felt a sudden shock, which raised him from his chair, and shook the plaster from the sides of the room. The roof was so violently shaken, that he imagined the engine shaft had been falling in. At this time two miners were employed in carting, or drawing along the drifts of the mines, the ore and other materials to be raised up at the shafts. The drift in which they were working was about 120 yards deep, and the space from one end to the other fifty yards or upwards. The miner at the end of the drift had just loaded his cart, and was drawing it along; when he was surprised by a shock, which terrified him from his employment, and while he was consulting with his fellow-workmen what means they should take for their safety, they were surprised by a second shock more violent than the first. Another miner who worked about twelve yards below, told them that the violence of the second shock had been so great, that it caused the rocks to grind upon one another. His account was interrupted by a third shock, which, after an interval of four or five minutes, was succeeded by a fourth; and, about the same space of time after, by a fifth; none of which were so violent as the second. They heard, after every shock, a loud rumbling in the bowels of the earth, which continued about half a minute, gradually decreasing, or seeming to remove to a greater distance. At White Rock in Glamorganshire, about two hours ebb of the tide, and near three quarters after 6 P. M., a vast quantity of water rushed up with a prodigious noise; floated two large vessels, the least of them above 200 tons; broke their moorings, drove them across the river, and almost overset them. The whole rise and fall of this extraordinary body of water did not last above ten minutes, nor was it felt in any other part of the river, so that it seemed to have gushed out of the earth at that very place. At Loch Lomond in Scotland, about half an hour after 9 A. M., all of a sudden, without the least gust of wind, the water rose against its banks with great rapidity, but immediately subsided, till it was as low as any person then present had ever seen it in the greatest summer drought. Instantly it returned towards the shore, and in five minutes rose again as high as before. The agitation continued at the same rate till fifteen minutes after 10 A. M. taking five minutes to rise, and as many to subside. From fifteen minutes after ten till eleven, the height of every rise came somewhat short of that immediately preceding, taking five minutes to flow, and as many to ebb, till the water was entirely settled. The greatest perpendicular height of this swell was two feet four inches. A still more remarkable phenomenon attending the earthquake in this lake was, that a large stone lying at some distance from shore, but in water so shallow that it could easily be seen, was forced out of its place in the lake upon dry land, leaving a deep furrow in the

ground all along the way in which it had moved. In Loch Ness, about half an hour after nine, a very great agitation was observed in the water. About ten the river Oich, which runs on the north side of Fort Augustus, into the head of the loch, was observed to swell very much, and run upwards from the loch with a pretty high wave, about two or three feet higher than the ordinary surface. The motion of the wave was against the wind, and it proceeded rapidly for about 200 yards up the river. It then broke on a shallow, and flowed three or four feet on the banks, after which it returned gently to the loch. It continued ebbing and flowing in this manner for about an hour.

In Ireland the effects of this earthquake were confined to remarkable agitations of the water, similar to those already described.

The above are the most striking phenomena with which the earthquake of November 1st, 1755, was attended on the surface of the earth. Those which happened below ground cannot be known but by the changes observed in springs &c., which were in many places very remarkable. At Colares, on the afternoon of the 31st of October, the water of a fountain was greatly decreased: on the morning of the 1st of November it ran very muddy; and, after the earthquake, returned to its usual state both as to quantity and clearness. On the hills, numbers of rocks were split; and there were several rents in the ground, but none considerable. In some places where formerly there had been no water, springs burst forth, which continued to run. Some of the largest mountains in Portugal were impetuously shaken as it were from their foundation; most of them opened at their summits, split and rent in a wonderful manner, and huge masses of them were thrown down into the subjacent valleys. From the rock Alvidar, near the hill Fojo, a kind of parapet was broken off, which was thrown up from its foundation into the sea. At Varge, on the river Macaas, during the earthquake, many springs of water burst forth, some spouted up eighteen or twenty feet, throwing up sand of various colors, which remained on the ground. A mountainous point, seven or eight leagues from St. Ube's, cleft asunder, and threw off several vast masses of rock. In Barbary a large hill was rent in two; the two halves fell different ways, and ouried two large towns. In another place, a mountain burst open and a stream issued from it as red as blood. At Tangier, all the fountains were dried up, so that there was no water to be had till night. A remarkable change was observed in the medicinal waters of Toplitz, a village in Bohemia famous for its baths. These waters were discovered in 762; from which time the principal spring of them had constantly thrown out hot water in the same quantity, and of the same quality. On the morning of the earthquake, between 11 and 12 A. M. the principal spring cast forth such a quantity of water, that in half an hour all the baths ran over. About half an hour before this, the spring had flowed turbid and muddy; then, having stopped entirely for a minute, it broke forth again with prodigious violence, driving before it a considerable quantity of reddish ochre. After this it became clear and flowed as pure as before. It still continues to do so; but the water is in greater quantity, and hotter, than before the earthquake. At Angoulesme in France, a subterraneous noise like thunder was heard; and presently after the earth opened, and discharged a torrent of water mixed with red sand. Most of the springs in the neighbourhood sunk in such a manner, that for some time they were thought to be quite dry. In Britain no considerable alteration was observed in the earth, except that, near the lead mine in Derbyshire, a cleft was observed about a foot deep, six inches wide, and 150 yards in length.

The shocks of this earthquake were felt most violently at sea. Off St. Lucar, the captain of the Nancy frigate felt his ship so violently shaken, that he thought she had struck the ground; but, on heaving the lead, found he was in a great depth of water. Captain Clark from Denia, in N. lat. 36° 24′, between 9 and 10 A. M., had his ship shaken and strained as if she had struck upon a rock, so that the seams of the deck opened, and the compass was overturned in the binnacle. The master of a vessel bound to the American Islands, being in N. lat. 25°, W. long. 40°, and writing in his cabin, heard a violent noise, as he supposed, in the steerage; and shortly after the ship seemed as if she had been suddenly jerked up and suspended by a rope fastened to the mast head. Coming on deck, he found a violent current crossing the ship's way to the leeward. In about a minute, this current returned with great impetuosity, and, at a league distant, three craggy-pointed rocks appeared throwing up water of various colors resembling fire. These phenomena, in two minutes, ended in a black cloud, which ascended very heavily, and after it had risen above the horizon, no rocks were to be seen. Between 9 and 10 A. M. another ship, forty leagues west of St. Vincent, was so strongly agitated, that the anchors, which were lashed, were thrown up. Immediately after this, the ship sunk in the water as low as the main chains. The lead showed a great depth of water, and the line was tinged of a yellow color and smelt of sulphur. The shock lasted about ten minutes, but they felt smaller ones for twenty-four hours. Such were the phenomena of this very remarkable and destructive earthquake, which extended over a tract of at least 4,000,000 of square miles.

The earthquakes, which in 1783 ruined a great part of Italy and Sicily, though much more confined in their extent, than that of 1755, seem to have been not at all inferior in violence. Sir William Hamilton thus states their effects, 'If on a map of Italy, and with your compass on the scale of Italian miles you measure off twenty-two,' says this writer, 'and then fixing the central point in the city of Oppido, form a circle, the radii of which will be twenty-two miles; you will include all the towns, villages, &c., that have been utterly ruined, the spots where the greatest mortality happened, and where there have been the most visible alterations on the face of the earth: then extend your compass on the same scale to seventy-two miles, preserving the same centre, and form another circle, you will include the

whole country that has any mark of having been affected by the earthquake.' A circumstance was remarked in which this earthquake differed from others, viz. that if two towns were situated at an equal distance from this centre, one on the hill, the other on the plain or in a bottom, the latter always suffered most. From the most authentic accounts received by the king of Sicily's secretary of state, it appeared that the part of Calabria which had been most affected by this calamity, was comprehended between 38° and 39° of N. lat.; that the greatest force of the earthquake had been exerted from the foot of those mountains of the Apennines called Dijo, Sacro, and Caulene, extending west to the Tyrrhene sea; that the towns, villages and farm-houses nearest these mountains, situated either on the hills or the plain, were totally ruined by the shock of the 5th of February about noon; that even the more distant towns had been greatly damaged by the subsequent shocks of the earthquakes, and effectually by those of the 7th, 26th, and 28th, of February, and that of the 1st of March; that from the first shock of the 5th of February, the earth had been in a continual tremor; and that the motion of the earth had been either whirling like a vortex, horizontal, or by pulsations, or by beatings from the bottom upwards. This variety of motions increased the apprehensions of the miserable inhabitants, who expected every moment that the earth would open under their feet, and swallow them up. These phenomena had been attended with irregular and furious gusts of wind: and from all these causes, the face of that part of Calabria comprehended between 38° and 39° was entirely altered. See CALABRIA. The number of lives lost was estimated at 32,367; but Sir William Hamilton is of opinion, that, including strangers, it could not be less than 40,000. The fate of the inhabitants of Scilla was extremely affecting. On the first shock of the earthquake, February 5th, they had fled to the sea-shore, where they hoped for safety; but in the night a furious wave overflowed the land for three miles, sweeping off in its return 2473 of the inhabitants, among whom was the prince himself, who were at that time either on the strand, or in boats near the shore.

Sir William Hamilton landed on the 6th of May at Pizzo in Calabria Ultra. This town is situated on a volcanic tufa, and had been greatly damaged by the earthquake of February 5th, but completely ruined by that of the 28th March. He was told that the volcano of Stromboli, which is in full view of the town, though distant about fifty miles, had smoked less and thrown up a smaller quantity of inflamed matter during the earthquakes, than it had done for some years before; and that slight shocks still continued to be felt. Sir William had soon a convincing proof that this last information was true; for, sleeping that night in his boat, he was awakened with a smart shock, which seemed to lift up the bottom of the boat, but was not attended with any subterraneous noise. From Pizzo he passed through a most beautiful country to Monteleone, formerly interspersed with towns and villages: but at that time they all lay in ruins. Monteleone had suffered little on the 5th of February, but was greatly damaged on the 28th of March. The shocks of the earthquake came with a rumbling noise from the west, beginning usually with the horizontal motion, and ending with the vorticose, by which last the greatest part of the buildings in this province were destroyed. Before a shock the clouds seemed to be still and motionless, but, immediately after a heavy shower of rain, a shock quickly followed. During a shock, the peasants told him that the horses and oxen extended their legs wide asunder, that they might not be thrown down; and that they gave evident signs of being sensible of its approach. 'I myself,' says he, 'have observed, that, in those parts which have suffered most by earthquakes, the braying of an ass, the neighing of a horse, or the cackling of a goose, always drove people out of their barracks, and was the occasion of many Pater Nosters and Ave Marias being repeated, in expectation of a shock.' From Monteleone he descended into the plain, passing through many towns and villages which had been more or less ruined according to their vicinity to the plain. The town of Mileto had not a house left standing. At some distance he saw Soriano, and the Dominican convent, a heap of ruins. Passing through the ruined town of St. Pietro, in his way to Rosarno, he had a distant view of Sicily and the summit of Ætna, which then sent forth a considerable smoke. Just before his arrival at Rosarno, he passed over a swampy plain, in many parts of which he was shown small hollows in the earth, of the shape of an inverted cone. They were covered with sand, as was the soil near them. He was informed that, during the earthquake of February 5th, a fountain of water, mixed with sand, had been driven up from each of these spots to a considerable height. Before this appearance, he said, the river was dry; but soon after returned and overflowed its banks. The same phenomenon had been constant with respect to all other rivers in the plain, during the dreadful shock of the 5th of February. In the other parts where this phenomenon had been exhibited, the ground was always low and rushy. Between this place and Rosarno they passed the river Metauro on a strong timber bridge, 700 palms long. By the cracks made in the banks and in the bed of the river by the earthquake, it was quite separated in one part; and, the level on which the piers were placed having been variously altered, the bridge had taken an undulated form, so that the rail on each side was curiously scolloped; but, the separated parts having been joined again, it was then passable. The town of Rosarno, with the duke of Monteleone's palace, was entirely ruined; but the walls remained about six feet high, and were at that time fitting up as barracks. The only building that remained unhurt at Rosarno was the town gaol, in which were three notorious villains, who would probably have lost their lives if they had remained at liberty. From Rosarno Sir William proceeded to Laureana, where he was conducted to the place where two tenements were said to have exchanged situations. These were situated in a valley surrounded by high grounds: and the surface of the earth, which was removed, had probably been undermined by rivulets from the mountains, then plainly discernible on the bare spot, which the

tenements had quitted. Their course down the valley was sufficiently rapid to prove that it had not been a perfect level. The earthquake, he supposes, had opened some depositories of rain water, in the clay hills which surround the valley; which water, mixed with the loose soil, taking its course suddenly through the undermined surface, lifting it up with the large olive and mulbery trees, and a thatched cottage, floated the whole piece of ground, with all its vegetation, about a mile down the valley, where it then stood with most of the trees erect. These two tracts were about a mile long and half a mile broad. 'I travelled,' says he afterwards, 'four days in this plain, in the midst of such misery as cannot be described. The force of the earthquake there was so great, that all the inhabitants of the towns were buried, alive or dead, in the ruins of their houses in an instant. The town of Polistene was large, but ill situated between two rivers that were subject to overflow: 2100 out of 6000, lost their lives here on the fatal 5th of February.' At Casal Nuova the princess Gerace Grimaldi, with 4000 of her subjects, perished on the same day by the explosion. Some who had been dug alive out of the ruins, told our author, that they had felt their houses fairly lifted up without having the least previous notice. An inhabitant of Casal Nuova was at that moment on a hill overlooking the plain; when, feeling the shock, and turning round, instead of the town he saw only a thick cloud of white dust like smoke, the natural effect of the crushing of the buildings, and the mortar flying off. Casal Nuova was so effectually destroyed by this dreadful shock, that neither house nor street remained, but all lay in one confused heap of ruins. Castillace, and Milicusco, were both in the same situation. Terra Nuova, situated in the same plain, stood between two rivers, which, with the torrents from the mountains, nad cut deep and wide chasms in the soft sandy clay soil of which it is composed. At Terra Nuova the ravine is not less than 500 feet deep, and three quarters of a mile broad. 'Here, from the great depth of the ravine, and the violent motion of the earth, two huge portions of the latter, on which a great part of the town stood, which consisted of some hundred houses, had been detached into the ravine, and nearly across it, at about the distance of half a mile from the place where they formerly stood; and what is very extraordinary, many of the inhabitants who had taken this singular leap in their houses, were nevertheless dug out alive, and some unhurt.' Sir William's guide there, who was both a priest and physician, having been buried in the ruins of his house by the first shock, was immediately blown out of it and delivered by the second. There were many well attested instances of the same circumstance having happened in different parts of Calabria. Part of the rock on which the city stood at Oppido was detached, with several houses, into the ravine: 'But that,' says Sir William, 'is a trifling circumstance in comparison of the very great tracts of land, with plantations of vines and olives, which had been detached from one side of the ravine to the other, though the distance is more than half a mile. It is well attested, that a countryman, who was ploughing his field in this neighbourhood with a pair of oxen, was transported with his field and team clear, from one side of a ravine to the other, and that neither he nor his oxen were hurt. Having walked over the ruins of Oppido, I descended into the ravine, and examined carefully the whole of it. Here I saw indeed the wonderful force of the earthquake, which has produced exactly the same effects as those described in the ravine at Terra Nuova, but on a scale infinitely greater. The enormous masses of the plain, detached from each side of the ravine, lie sometimes in confused heaps, forming real mountains, and having stopped the course of two rivers, one of which is very considerable, great lakes are already formed; and if not assisted by nature or art, so as to give the rivers their due course, must infallibly be the cause of a general infection in the neighbourhood. Sometimes I met with a detached piece of the surface of the plain, of many acres in extent, with the large oaks and olive trees, with corn or lupins under them, growing as well and in as good order at the bottom of the ravine as their companions, from whence they were separated, do on their native soil, at least 500 feet higher, and at the distance of about three quarters of a mile. I met with whole vineyards in the same order in the bottom, that had likewise taken the same journey. As the banks of the ravine, from whence these pieces came, are now bare and perpendicular, I perceived that the upper soil was a reddish earth, and the under one a sandy white clay, very compact, and like a soft stone. The impulse these huge masses received, either from the violent motion of the earth alone, or that assisted with the additional one of the volcanic exhalations set at liberty, seems to have acted with greater force on the lower and more compact stratum, than on the upper cultivated crust: for I constantly observed, where these cultivated lands lay, the under stratum of compact clay had been driven some hundred yards farther, and lay in confused blocks; and, as I observed, many of these blocks were in a cubical form. The under soil, having had a greater impulse, and leaving the upper in its flight, naturally accounts for the order in which the trees, vineyards, and vegetation fell, and remain at present in the bottom of the ravine. In another part of the bottom of the ravine, there is a mountain composed of the same clay soil, and which was probably a piece of the plain detached by an earthquake at some former period: it is about 250 feet high, and 400 feet diameter at its basis. This mountain, as is well attested, has travelled down the ravine near four miles; having been put in motion by the earthquake of the 5th of February. The abundance of rain which fell at that time, the great weight of the fresh detached pieces of the plain, which I saw heaped up at the back of it, the nature of the soil, of which it is composed, and particularly its situation on a declivity, account well for this phenomenon; whereas the reports which came to Naples, of a mountain having leaped four miles, had rather the appearance of a miracle. I found some single timber trees also, with a lump of their native soil at their roots, standing upright in the bottom of the ravine, and which

had been detached from the bottom of the plain above-mentioned. I observed also, that many confused heaps of the loose soil, detached by the earthquake from the plains on each side of the ravine, had actually run like volcanic lava (having probably been assisted by the heavy rain) and produced many effects much resembling those of lava, during their course down a great part of the ravine. At Santa Cristina, near Oppido, the like phenomena have been exhibited, and the great force of the earthquake of the 5th of February seems to have been exerted on these parts, and at Casal Nuova, and Terra Nuova.' At Reggio the shock had been much less violent than in the places he had hitherto visited; and 'though there was not a house in it inhabited or habitable, yet' says he, 'after having been several days in the plain, where every building is levelled with the ground, a house with a roof, or a church with a steeple, was to me a new and refreshing object.' In this place he had an account from the archbishop of the earthquakes of 1779 and 1780, which obliged the inhabitants, in number 16,400, to remain in barracks for several months, without having done any considerable damage to the town. He was informed also, that all animals and birds are in a greater or less degree much more sensible of an approaching shock of an earthquake, than any human being; but that geese, above all, seem to be the soonest and most alarmed at the approach of a shock; if in the water, they quit it immediately; and will not be driven into it for some time after. The shock which damaged Reggio came on gently, so that the people had time to make their escape, and only 126 were killed; but in the plain this shock was as instantaneous as it was violent and destructive. On the 14th of May, Sir William Hamilton left Reggio, and set sail for Messina. He found that the shock, though very violent there, had been far inferior to what he had seen the effects of in other places. Many houses, even in the lower part of the town, were standing, and some little damaged; but, in the upper and more elevated situations, the earthquakes seemed to have scarce had any effect. 'A strong instance (says our author) of this is, that the convent of Santa Barbara, and that called the Novitiato de Gesniti, both on an elevated situation, have not a crack in them; and that the clock of the latter has not been deranged in the least by the earthquakes, which have afflicted this country for four months past, and which still continue in some degree.' Notwithstanding this comparative mildness, the shock at Messina had been very terrible. All the beautiful front of the palazzate, which extended in very lofty uniform buildings, in the shape of a crescent, had been in some parts totally ruined, in others less; and there were cracks in the earth of the quay, a part of which had sunk above a foot below the level of the sea. During the earthquake, fire had been seen to issue from the cracks of the quay; but our author is persuaded that this was only a vapor charged with electrical fire, or inflammable air. Here also he was informed, that the shock of the 5th of February had been from the bottom upwards; but the subsequent ones generally horizontal or vorticose. A remarkable circumstance was observed at Messina, and through the whole coast of Calabria, which had been most affected by the earthquake, viz. that a small fish called cicirelli, resembling the English white bait, but larger, and which usually lie at the bottom of the sea buried in the sand, had, ever after the commencement of the earthquakes to the time this account was written, continued to be taken near the surface, and that in such abundance as to be common food for the poorest of the people; whereas before the earthquakes this fish was rare, and reckoned among the greatest delicacies. Fish of all kinds also were taken in greater abundance on these coasts after the commencement of the earthquakes than before; which our author supposes to have been occasioned either by the volcanic matter having heated the bottom of the sea, or that the continual tremor of the earth had forced them out of their retreats. At Messina, Sir William was told that on the 5th of February, and for three days following, the sea, about a quarter of a mile from the citadel, rose, and boiled in an extraordinary manner, and with a most horrid and alarming noise; the water in other parts of the strait being perfectly calm. 'This,' says he, 'seems to point out exhalations or eruptions from cracks at the bottom of the sea, which may probably have happened during the violence of the earthquakes; all of which I am convinced have here a volcanic origin.'

In various parts of South America, earthquakes have been equally tremendous and fatal. It is remarkable that the city of Lima, the capital of Peru, situated in about 12° of S. lat., although scarcely ever visited by tempests, and equally unacquainted with rain as with thunder and lightning, has been singularly exposed to the fury of earthquakes, which happen here so frequently, that the inhabitants are under continual apprehensions of being, from their suddenness and violence, buried in the ruins of their own houses: yet these earthquakes, though so sudden, have their presages; one of the principal of which is a rumbling noise in the bowels of the earth, about a minute before the shocks are felt, that seems to pervade all the adjacent subterraneous part; this is followed by dismal howlings of the dogs, who seem to presage the approaching danger. The beasts of burden passing the streets stop, and by a natural instinct spread open their legs, the better to secure themselves from falling. On these portents, the terrified inhabitants fly from their houses into the streets with such precipitation, that, if it happens in the night, they appear quite naked; the urgency of the danger at once banishing all sense of delicacy or shame. Thus the streets exhibit such odd and singular figures as might afford matter of diversion, were it possible to be diverted in so terrible a moment. This sudden concourse is accompanied with the cries of children waked out of their sleep, blended with the lamentations of the women, whose agonising prayers to the saints increase the common fear and confusion. The men are also too much

affected to refrain from giving vent to their terror; so that the whole city exhibits a dreadful scene of consternation and horror.

The earthquakes that have occurred at the capital of Spanish America are very numerous. The first since the establishment of the Spaniards was in 1582; but the damage was much less considerable than in some of the succeeding. Six years after, Lima was again visited by another earthquake, so dreadful, that it is still solemnly commemorated every year. In 1609 there was a third, which overturned many houses. On the 27th of November, 1630, such prodigious damage was done in the city by an earthquake, that, in acknowledgment of its not having been entirely demolished, a festival on that day is annually celebrated. Twenty-four years afterwards, on the 3rd of November, the most stately edifices in the city, and a great number of houses, were destroyed by a similar attack; but the inhabitants retiring, few of them perished. Another dreadful percussion took place in 1678; but one of the most terrible was on the 28th of October, 1687. It began at four in the morning, and destroyed many of the finest public buildings and houses, in which a great number of the inhabitants perished; but this was little more than a prelude to what followed; for two hours afterwards the shock returned, with such impetuous concussions, that all was laid in ruins, and the inhabitants felt themselves happy in being only spectators of the general devastation by having saved their lives, though with the loss of all their property. During this second shock the sea, retiring considerably, and then returning in mountainous waves, entirely overwhelmed Callao, which is at five miles distance from Lima, and all the adjacent country, together with the miserable inhabitants. From this time six other earthquakes were felt at Lima previous to that of 1746, on the 28th of October, at half an hour after ten at night, when the concussions began with such violence, that, in little more than three minutes, the greatest part, if not all the buildings in the city, were destroyed, burying under their ruins those inhabitants who had not made sufficient haste into the streets and squares, the only places of safety. At length the horrible effects of the first shock ceased; but the tranquillity was of short duration, the concussions swiftly succeeding each other. The fort of Callao also sunk in ruins; but what it suffered from the earthquake in its building was inconsiderable, when compared to the dreadful catastrophe which followed; for the sea, as is usual on such occasions, receding to a considerable distance, returned in mountainous waves, foaming with the violence of the agitation, and suddenly buried Callao and the neighbouring country in its flood. This, however, was not entirely effected by the first swell of the waves; for the sea retiring further, returned with still greater impetuosity, and covered both the walls and other buildings of the place; so that what even had escaped the first inundation, was totally overwhelmed by those succeeding mountainous waves. Twenty-three ships and vessels, great and small, were then in the harbour, nineteen of which were sunk, and the other four, among which was a frigate named St. Fermin, were carried by the force of the waves to a considerable distance up the country. This terrible inundation and earthquake extended to other parts on the coast, and several towns underwent the same fate as the city of Lima; where the number of persons who perished, within two days after it began, amounted, according to the bodies found, to 1300, beside the maimed and wounded, many of whom lived only a short time in great torture.

Various theories have been invented to explain the phenomena of earthquakes. Till lately, the hypotheses of modern philosophers were much the same with those of the ancients. Anaxagoras supposed the cause of earthquakes to be subterraneous clouds bursting out into lightning, which shook the vaults that confined them. Others imagined that the arches, which had been weakened by continual subterraneous fires, at length fell in. Others derived these double convulsions from the rarefied steam of waters heated by some neighbouring fires (an hypothesis revived in modern times by M. Dolomieu); whilst some, among whom was Epicurus, and several of the Peripatetics ascribed them to the ignition of certain inflammable exhalations. This last hypothesis has been adopted by many of the most celebrated moderns, as Gassendus, Kircher, Schottos, Varenius, Des Cartes, Du Hamel, Honorius, Fabri, &c. The philosopher last mentioned, indeed supposed, that waters prodigiously rarefied by heat, might sometimes occasion earthquakes. The others supposed, that there are many and vast cavities under ground, which have a communication with one another: some of which abound with waters; others with vapors and exhalations, arising from inflammable substances, as nitre, bitumen, sulphur, &c. These combustible exhalations they supposed to be kindled by a subterraneous spark, or by some active flame gliding through a narrow fissure from without, or by the fermentation of some mixture; and when this happens, that they may necessarily produce pulses, tremors, and ruptures at the surface, according to the number and diversity of the cavities, and the quantity and activity of the inflammable matter. This hypothesis they illustrated by a variety of experiments, such as mixtures of iron filings and brimstone buried in the earth, gun-powder confined in pits, &c., by all which a shaking of the earth will be produced. Dr. Woodward suggests another hypothesis. He supposes that the subterraneous heat or fire, which is continually elevating water out of the abyss, which, according to him, occupies the centre of the earth, to furnish rain, dew, springs, and rivers, may be stopped in some particular part. When this obstruction happens, the heat causes a great swelling and commotion in the waters of the abyss; and at the same time, making the like effort against the superincumbent earth, that agitation and concussion of it is occasioned which we call an earthquake. M. Amontons, supposing the atmosphere to be about forty-five miles high, and that the density of the air increases in proportion to the absolute height of the superincumbent column of fluid,

shows that, at the depth of 43,528 fathoms below the surface of the earth, air is but one-fourth lighter than mercury. Now this depth of 43,528 fathoms is only a seventy-fourth part of the semidiameter of the earth; and the vast sphere beyond this depth, in diameter 6,451,538 fathoms, may probably be only filled with air; which will be here greatly condensed, and much heavier than the heaviest bodies we know in nature. But it is found by experiment, that the more air is compressed, the more does the same degree of heat increase its spring, and the more capable does it render it of a violent effect; and that, for instance, the degree of heat of boiling water increases the spring of the air above what it has in its natural state, in our climate, by a quantity equal to a third of the weight wherewith it is pressed. Whence we may conclude, that a degree of heat, which on the surface of the earth will only have a moderate effect, may be capable of a very violent one below. And, as we are certain that there are in nature degrees of heat much greater than that of boiling water, it is possible there may be some whose violence, further increased by the immense weight of the air, may be sufficient to break and overturn this solid orb of 43,528 fathoms; whose weight, compared to that of the included air, would be but a trifle.

In March, 1749, an earthquake was felt at London and several other places in Britain. Dr. Stukely, who had been much engaged in electrical experiments, began to suspect that phenomena of this kind ought to be attributed not to vapors or fermentations generated in the bowels of the earth, but to electricity. In a paper published by him on this subject, he rejects all the above hypotheses for the following reasons:—1. That there is no evidence of any remarkable cavernous structure of the earth; but that, on the contrary, there is reason to presume that it is in a great measure solid, so as to leave little room for internal changes and fermentations within its substance; nor do coal-pits, when on fire, ever produce any thing resembling an earthquake. 2. In the earthquake at London, in March 1749, there was no such thing as fire, vapor, smoke, smell, or an eruption of any kind observed, though the shock affected a circuit of fifty miles in diameter. This consideration alone, of the extent of surface shaken by an earthquake, he thought sufficient to overthrow the supposition of its being owing to the expansion of any subterraneous vapors. For, as small fire-balls bursting in the air propagate a sulphureous smell to the distance of several miles, it cannot be supposed that so immense a force, acting instantaneously on that compass of ground, should never break the surface of it, nor become discoverable either to the sight or the smell; besides that such a fermentation would require a long time. That such an effect, therefore, should be produced instantaneously, can be accounted for by electricity only, which acknowledges no sensible transition of time, nor any bounds. 3. If vapors and subterraneous fermentations, explosions, and eruptions, were the cause of earthquakes, they would absolutely ruin the whole system of springs and fountains, wherever they had once been; which is contrary to fact, even when they have been frequently repeated. In the earthquake in Asia Minor, A. D. 17, which destroyed thirteen great cities, and shook a mass of earth 300 miles in diameter, nothing suffered but the cities; neither the springs nor the face of the country being injured. 4. That any subterraneous power, sufficient to move thirty miles in diameter, must be lodged at least fifteen or twenty miles below the surface; and therefore must move an inverted cone of solid earth, the base of which is thirty miles in diameter, and the axis fifteen or twenty; an effect impossible to any natural power whatever, except electricity. So in Asia Minor, such a cone must have been 300 miles in the diameter of the base, and 200 in the axis: which not all the gun-powder that has been made since the invention of it, much less any vapors generated so far below the surface, could possibly effect. 5. A subterraneous explosion will not account for the manner in which ships, far from land, and even fish, are affected during an earthquake. A subterraneous explosion would only produce a gradual swell, and not give so quick an impulse to the water as would make it feel like a stone. From these circumstances the Doctor concluded, that an earthquake was a shock of the same kind as those in electrical experiments. And this hypothesis was confirmed by the phenomena attending earthquakes, particularly those in 1749 and 1750, which gave rise to this publication. The weather, for five or six months before, had been uncommonly warm; the wind south and south-west, without rain; so that the earth must have been in a state peculiarly ready for an electrical shock. Before the earthquake at London, all vegetables had been uncommonly forward: and electricity is well known to quicken vegetation. The aurora borealis had been frequent about that time; and, just before the earthquake, had been twice repeated in such colors as had never been seen before. It had also removed southerly, contrary to what is common in England; so that the Italians, and those among whom earthquakes were frequent, actually foretold the earthquake. The year had been remarkable for fire-balls, lightning, and coruscations; and these are meteors of an electrical nature. In such circumstances, nothing, he says, is wanting to produce an earthquake, but the presence of some non-electric body; which must be had ab extra from the atmosphere. Hence he infers, that if a non-electric cloud discharge its contents upon any part of the earth, in that highly electrical state, an earthquake must necessarily ensue. As the discharge from an excited tube produces a commotion in the human body, so the discharge of electric matter from many miles of solid earth must needs be an earthquake; and the snap from the contact, the horrid uncouth noise attending it. Dr. Stukely had been informed, that, a little before the earthquake, a large and black cloud suddenly covered the atmosphere, which probably occasioned the shock by the discharge of a shower. A sound was observed to roll from the Thames towards Temple-Bar before the houses ceased to nod, just as the electrical snap precedes the shock. This noise (which generally precedes

earthquakes) he thought could be accounted for only on electrical principles; for, in a subterraneous eruption, the direct contrary would happen. The flames and sulphureous smells, which are sometimes observed in earthquakes, might, he thought, be more easily accounted for on the supposition of their being electrical phenomena, than from their being occasioned by eruptions from the bowels of the earth. So also the suddenness of the concussion, felt at the same instant over such a large surface, and the little damage also which earthquakes generally occasion, sufficiently point out what sort of motion it is; not a convulsion of the bowels of the earth, but a uniform vibration along its surface, like that of a musical string, or a glass, when rubbed on the edge with one's finger. The circumstance of earthquakes chiefly affecting the sea-coast, places along rivers, &c., is a further argument of their being electrical phenomena. This is illustrated by a particular account of the direction in which the earthquake was conveyed. The last argument he uses is taken from the effects which it had on persons of weak constitutions, who were, for a day or two after it happened, troubled with pains in the back, rheumatisms, hysterics, and nervous disorders; just in the same manner as they would have been after an actual electrification: to some, these disorders proved fatal. The same hypothesis was advanced by Signior Beccaria, without knowing any thing of Dr. Stukely's discoveries.

Dr. Priestley, in his History of Electricity, observes, upon these theories, that a more probable hypothesis may be formed out of them both. 'Suppose,' says he, 'the electric matter to be accumulated in one part of the surface of the earth, and on account of the dryness of the season not easily to diffuse itself; it may force its way into the higher regions of the air, forming clouds in its passage out of the vapors which float in the atmosphere, and occasion a sudden shower, which may further promote the passage of the fluid. The whole surface, thus unloaded, will receive a concussion, like any other conducting substance, on parting with, or receiving, a quantity of the electric fluid. The rushing noise will likewise sweep over the whole extent of the country. And upon this supposition also the fluid, in its discharge from the country, will naturally follow the course of the rivers, and also take the advantage of any eminences to facilitate its ascent into the higher regions of the air.' The Dr., making experiments with a battery on the passage of the electrical fluid over different conducting substances, and, among these, over water,—and remarking a resemblance between its passage over the surface of the water, and that which Dr. Stukely supposed to sweep the surface of the earth, when a considerable quantity of it is discharged to the clouds during an earthquake,—immediately suspected that the water over which it passed, and which was visibly thrown into a tremulous motion, must receive a concussion resembling that which is given to the waves of the sea on such occasions. To try this, he himself, and others present, put their hands into the water at the time that the electric flash passed over its surface; and they felt a sudden concussion given to them, exactly like that which affects ships at sea during an earthquake. This percussion was felt in various parts of the water, but was strongest near the place where the explosion was made. 'This similarity in the effect,' he says, 'is a considerable evidence of a similarity in the cause. Pleased with this resemblance of the earthquake, I endeavoured to imitate that great natural phenomenon in other respects: and, it being frosty weather, I took a plate of ice, and placed two sticks about three inches high on their ends, so that they would just stand with ease; and upon another part of the ice I placed a bottle, from the cork of which was suspended a brass ball with a fine thread. Then, making the electrical flash pass over the surface of the ice, which it did with a very loud report, the nearer pillar fell down, while the more remote stood; and the ball which had hung nearly still, immediately began to make vibrations about an inch in length, and nearly in a right line from the place of the flash. I afterwards diversified this apparatus, erecting more pillars, and suspending more pendulums, &c.; sometimes upon bladders stretched on the mouth of open vessels, and at other times on wet boards swimming in a vessel of water. This last method seemed to answer the best of any; for the board representing the earth, and the water the sea, the phenomena of them both during an earthquake may be imitated at the same time; pillars, &c., being erected on the board, and the electric flash being made to pass either over the board, over the water, or over them both.' The last three hypotheses, though somewhat differing, yet agree in the main; but, if a particular solution of the phenomena is required, every one of them will be found deficient: nor does the theory of this subject appear to have been sufficiently understood to be worth pursuing much further; we only therefore add that the late Dr. Mason Goode attempts to account for the phenomena of earthquakes by the old theory of subterraneous fires.

That fires to an enormous extent, and produced by various causes, may exist at different depths beneath the surface of the earth, must, he thinks, be clear to every one who has attentively considered the subject: and he quotes a curious series of experiments, lately conducted by Sir James Hall, to prove that where the substances in which such fires occur lie profound, and are surmounted by a very deep and heavy superincumbent pressure; and, more especially, where they, at the same time, contain large portions of elastic gases; the effects of such fires will be prodigiously greater, and more diversified, than where these circumstances are absent.

Earthquakes and volcanoes may be reckoned, for the most part, as this writer supposes, among the most powerful and extraordinary of these effects; and, as resulting from those chemical changes which the agency of fire principally produces in the interior of the solid crust of the globe. They have, probably, little further connexion with electricity, he says, than as causes that occasionally destroy the equilibrium; for although some authors have inferred, from the great velocity with which the shock of an earthquake is transmitted from place to place, that its

nature must be electrical; yet others have, with greater probability, attributed the rapid succession of the effects to the operation of a single cause, acting like subterranean heat, at a great distance below the earth's surface. There are, however, some circumstances which indicate such a connexion between the state of the atmosphere and the approach of an earthquake, as cannot easily be explained by any hypothesis. The shocks of earthquakes, and the eruptions of volcanoes, continues Dr. G., are in all probability modifications of the effects of one common cause; the same countries are liable to both of them; and, where the agitation produced by an earthquake extends farther than there is any reason to suspect a subterraneous commotion, it is probably propagated through the earth nearly in the same manner as a noise is conveyed through the air. See VOLCANO.

EARWAX. See ANATOMY.

EARWIG, in zoology. See FORFICULA.

EASDALE, a small island of the Hebrides, annexed to Argyleshire, about one mile and a half in diameter. It is famous for having afforded a great quantity of slate (ardesia tegularis). This, indeed, occupies the whole island, which is also traversed in many places with basaltic veins, and thin layers of quartzose and calcareous stones.

EASE, *n. s.* & *v. a.*
EASE'FUL, *adj.*
EASE'LESS, *adj.*
EASE-LOVING,
EASE'MENT, *n. s.*
EA'SY, *adj.*
EA'SILY, *adv.*
EA'SINESS, *n. s.*

Sax. eath; Goth. *azek*; Fr. *aise*; Ital. *agio*, which Menage derives from Lat. *otium*, becoming *ocium*, *ogium*, *ogeo*. Quiet; rest; tranquillity; peace; repose; freedom from pain, disturbance, labor, or engagement. The verb seems to be derived from the noun, and means to relieve, deliver, or rescue from trouble, disturbance, burden, or pain; or to alleviate, soothe, or assuage pain or trouble. Easeful and easy are peaceful; tranquil. Easeless, the opposite of this. Easement is relief; assistance; support; and in law, a service that one neighbour has of another by charter or prescription, without profit; as a way through his ground, a sink, &c.

I seye to you that to Sodom it schal be *esier* than to that cytee in that day. *Wiclif. Luk.* 10.

I will *ease* me of mine adversaries. *Isaiah* i. 24.

The chambers and the stablis werin wide,
And well we werin *esid* at the best. *Chaucer.*

She sodeinly enhaunceth them aloft,
And sodeynly mischeueth all the flocke.
The head that late lay *easily* and full soft,
In stede of pylows lyeth after on the blocke.
Sir T. More.

The service of God, in the solemn assembly of saints, is a work, though *easy*, yet withal very weighty, and of great respect. *Hooker.*

Since the custom of *easiness* to alter and change laws is so evil, no doubt but to bear a tolerable sore is better than to venture on a dangerous remedy. *Id.*

Complain, queen Margaret, and tell thy grief;
It shall be *eased*, if France can yield relief.
Shakspeare.

I spy a black, suspicious, threatening cloud,
That will encounter with our glorious sun,
Ere he attain his *easeful* western bed.
Id. Henry VI.

You may sooner, by imagination, quicken or slack a motion, than raise or cease it; as it is *easier* to make a dog go slower, than to make him stand still. *Bacon.*

Sounds move swiftly, and at great distance; but they require a medium well disposed, and their transmission is *easily* stopped. *Id. Natural History.*

We should not find her half so brave and bold
To lead it to the wars and to the seas;
To make it suffer watchings, hunger, cold,
When it might feed with plenty, rest with *ease*.
Davies.

Send me some tokens that my hope may live,
Or that my *easeless* thoughts may sleep and rest.
Donne.

Believe me, friends, loud tumults are not laid
With half the *easiness* that they are raised.
Ben Jonson.

Old friends are best. King James used to call for his old shoes; they were *easiest* for his feet. *Selden.*

Bold adventure to discover wide
That dismal world, if any clime perhaps
Might yield them *easier* habitation. *Milton.*

Baited with reasons not unplausible,
Win me into the *easy* hearted man,
And hug him into snares. *Id.*

An aching head will be no more *eased* by wearing a crown than a common night cap. *Sir W. Temple.*

Is it not to bid defiance to all mankind to condemn their universal opinions and designs, if, instead of passing your life as well and *easily*, you resolve to pass it as ill and as miserable as you can? *Id.*

Is it a small crime to wound himself by anguish of heart, to deprive himself of all the pleasures, or *eases*, or enjoyments of life? *Id.*

That which we call *ease* is only an indolency, or a freedom from pain. *L'Estrange.*

If ere night the gathering clouds we fear,
A song will help the beating storm to bear;
And that thou mayest not be too late abroad,
Sing, and I'll *ease* thy shoulders of thy load.
Dryden.

As if with sports my sufferings I could *ease*. *Id.*

The seeming *easiness* of Pindarick verse has made it spread; but it has not been considered. *Id.*

The priest on skins of offering takes his *ease*,
And nightly visions in his slumber sees. *Id. Æneid.*

With such deceits he gained their *easy* hearts,
Too prone to credit his perfidious arts. *Id.*

Lucan, content with praise, may lie at *ease*
In costly grots and marble palaces. *Id. Juvenal.*

Help and *ease* children the best you can; but by no means bemoan them. *Locke.*

No body feels pain that he wishes not to be *eased* of, with a desire equal to that pain, and inseparable from it. *Id.*

The safest way to secure honesty, is to lay the foundations of it early in liberality, and an *easiness* to part with to others whatever they have or like themselves. *Id.*

Keep your thoughts *easy* and free, the only temper wherein the mind is capable of receiving new informations. *Id.*

I think the reason I have assigned hath a great interest in that rest and *easiness* we enjoy when asleep. *Ray.*

Give to him, and he shall but laugh at your *easiness*; save his life, but, when you have done, look to your own. *South.*

Abstruse and mystick thoughts you must express
With painful care, but seeming *easiness*;
For truth shines brightest through the plainest dress.
Roscommon.

Easiness and difficulty are relative terms, and relate to some power; and a thing may be difficult to a weak man, which yet may be easy to the same person, when assisted with a greater strength. *Tillotson.*

We plainly feel whether at this instant we are *easy* or uneasy, happy or miserable. *Smalridge.*

Will he for sacrifice our sorrows *ease*?
And can our tears reverse his firm decrees? *Prior.*

Not soon provoked, she *easily* forgives;
And much she suffers, as she much believes. *Id.*

A marriage of love is pleasant; a marriage of interest *easy*; and a marriage where both meet—happy. *Addison's Spectator.*

When men are *easy* in their circumstances, they are naturally enemies to innovations. *Id. Freeh.*

Though he speaks of such medicines as procure sleep, and *ease* pain, he doth not determine their doses. *Arbuthnot.*

True *ease* in writing comes from art, not chance;
As those move *easiest* who have learned to dance. *Pope.*

Praise the *easy* vigour of a line,
Where Denham's strength and Waller's sweetness join. *Id.*

This plea, under a colour of friendship to religion, invites men to it by the *easiness* of the terms it offers. *Rogers.*

Give yourselves *ease* from the fatigue of waiting. *Swift.*

He has the advantage of a free lodging, and some other *easements*. *Id.*

They should be allowed each of them such a rent as would make them *easy*. *Id.*

Men make resolves, and pass into decrees,
The motions of the mind! with how much *ease*
In such resolves, doth passion make a flaw,
And bring to nothing, what was raised to law. *Churchill.*

It is the fate of mankind, too often, to seem insensible of what they may enjoy at the *easiest* rate. *Sterne.*

As men have their particular sins, which do most *easily* beset them, so they have their particular temptations which do most *easily* overcome them. *Mason.*

It is *easier* to suppress the first desire than to satisfy all that follow it. *Franklin.*

His scruples thus silenced, Tom felt more at *ease*,
And went with his comrades the apples to seize;
He blamed and protested, but joined in the plan;
He shared in the plunder, but pitied the man. *Cowper.*

EASEL, among painters, the frame whereon the canvas is laid.

Easel Pieces are such small pieces, either portraits or landscapes, as are painted on the easel; thus called to distinguish them from larger pictures drawn on walls, ceilings, &c.

EASING, in the sea-language, signifies the slackening a rope or the like. Thus, to ease the bow-line or sheet, is to let them go slacker; to ease the helm, is to let the ship go more large, more before the wind, or more larboard.

EAST, *n. s.* & *adj.* / EAST'ERLY, *adj.* / EAST'ERLING, *n. s.* / EAST'ERN, *adj.* / EAST'LAND, / EAST'WARD. — Sax. east; Belg. *oost*; Swed. and Teut. *oest*; Goth. *aust*, *eyst* (*austa*, to put forth). Mr. Tooke thinks, from *yrst*, angry, enraged, 'those who cannot pronounce *r*, usually supplying its place with *a*;' but *ustoth* is Mod. Goth. for the morn, and Gr. *εως*, the dawn, much more probable derivations. Minsheu says, ab Heb. מזרח, à radice זרח, to come or go forth. An easterling is an inhabitant of the east; eastland, pertaining to that quarter of the world; eastward, in that direction.

He oft in battle vanquished
Those spoilful, rich, and swarming *Easterlings*. *Spenser.*

I would not be the villain that thou thinkest
For the whole space that 's in the tyrant's grasp,
And the rich *East* to boot. *Shakspeare. Macbeth.*

When the *easterly* winds or breezes are kept off by some high mountains from the vallies, whereby the air, wanting motion, doth become exceeding unhealthful. *Raleigh.*

The gorgeous *East*, with richest hand,
Pours on her kings barbarick pearl, and gold. *Milton.*

The' angel caught
Our lingering parents, and to the' *eastern* gate
Led them direct. *Id.*

The moon, which performs its motion swifter than the sun, gets *eastward* out of his rays, and appears when the sun is set. *Browne's Vulgar Errours.*

What shall we do, or where direct our flight?
Eastward, as far as I could cast my sight,
From opening heavens, I saw descending light. *Dryden.*

These give us a view of the most *easterly*, southerly, and westerly parts of England. *Graunt's Bills of Mortality.*

They counting forwards towards the *East*, did allow 180 degrees to the Portugals *eastward*. *Abbot.*

The *eastern* end of the isle rises up in precipices. *Addison.*

Melancholy is a kind of demon that haunts our island, and often conveys herself to us in an *easterly* wind. *Id.*

Like *eastern* kings a lazy state they keep. *Pope.*

Water he chuses clear, light, without taste or smell, drawn from springs with an *easterly* exposition. *Arbuthnot.*

Eastern tyrants from the light of heaven
Seclude their bosom slaves. *Thomson.*

Eastern Java there
Kneels with the native of the furthest west;
And Æthiopia spreads abroad the hand,
And worships. *Cowper.*

There mildly dimpling, Ocean's cheek
Reflects the tints of many a peak
Caught by the laughing tides that lave
These Edens of the *eastern* wave. *Byron. Bride of Abydos.*

East, one of the four cardinal points of the world; being that point of the horizon where the sun is seen to rise when in the equinoctial. In Italy, and throughout the Mediterranean, the east wind is called the levante: in Greek *αναπολη* and *απηλιωτης*, because it comes from the side of the sun, *απ' ηλιου*; in Latin, eurus.

EA'STER, *n. s.* Sax. eastre; Dut. *ooster*; Germ. *ostern*. The day on which the Christian church commemorates our Saviour's resurrection. See below.

Didst thou not fall out with a taylor for wearing his new doublet before *Easter*? *Shakspeare. Romeo and Juliet.*

Victor's unbrother-like heat towards the Eastern churches, in the controversy about *Easter*, fomented that difference into a schism. *Decay of Piety.*

Easter is called by the Greeks, Πασχα, and by the Latins Pascha, from פסח, a Hebrew word signifying passage, applied to the Jewish feast of

the passover. It is called Easter in English, from the Saxon goddess Eostre, whose festival was held in April. The Asiatic churches kept their Easter upon the very same day that the Jews observed their passover, and others on the first Sunday after the first full moon in the new year. This controversy was determined in the council of Nice; when it was ordained that Easter should be kept upon one and the same day, which should always be Sunday, in all Christian churches in the world. But though the Christian churches differed as to the time of celebrating Easter, yet they all agreed in showing particular respect and honor to this festival. On this day, prisoners and slaves were set free, and the poor liberally provided for. The eve or vigil of this festival was celebrated with more than ordinary pomp, which continued till midnight, it being a tradition of the church that our Saviour rose a little after midnight; but in the east the vigil lasted till cock-crowing. It was in conformity to the custom of the Jews, in celebrating their passover on the fourteenth day of the first month, that the primitive fathers ordered that the fourteenth day of the moon, from the calendar new moon which immediately follows the 21st of March, at which time the vernal equinox happened upon that day, should be deemed the paschal full moon, and that the Sunday after should be Easter-day; and it is upon this account that the English rubric has appointed it upon the first Sunday after the first full moon immediately following the 21st day of March. Whence it appears that the true time for celebrating Easter, according to the intention of the council of Nice, was to be the first Sunday after the first full moon following the vernal equinox, or when the sun entered into the first point of Aries; and this was pope Gregory's principal design in reforming the calendar, to have Easter celebrated according to the determination of the council of Nice. For finding Easter, see CHRONOLOGY.

EASTER ISLAND, an island in the South Sea, thought to have been first discovered, in 1686, by one Davis an Englishman, who called it Davis's Land. It was next visited by commodore Roggewein, a Dutchman, in 1722, who gave it the name of Easter Island, and published many fabulous accounts concerning the country and its inhabitants. It was also visited by a Spanish ship in 1770, the captain of which gave it the name of St. Carlos. The most authentic account of this island, however, which has appeared, is that of captain Cook and Mr. Forster, who visited it in March 1770. According to them, the island is about ten or twelve leagues in circumference, and of a triangular figure; its greatest length from north-west to south-east is about four leagues, and its greatest breadth two. The hills are so high that they may be seen at the distance of fifteen or sixteen leagues. The north and east points of the island are of a considerable height; between them, on the south-east side, the shore forms an open bay, in which captain Cook thinks the Dutch anchored in 1722. He himself anchored on the west side of the island, three miles north from the south point. This, he says, is a good road with easterly winds, but a dangerous one when the wind blows from the contrary quarter, as the other on the south-east side must be with easterly winds: so that there is no good accommodation to be had for shipping round the whole island. The island is extremely barren; and bears evident marks not only of a volcanic origin, but of having been not very long ago entirely ruined by an eruption. As they approached the south point, Mr. Forster informs us that they observed broken rocks, whose cavernous appearance, and black and ferruginous color, seemed to indicate that they had been thrown up by subterraneous fire. Two detached rocks lie about a quarter of a mile off this point; one of them is singular on account of its shape, and represents a huge column; and both were inhabited by multitudes of sea-fowls. On landing, and walking into the country, they found the ground covered with rocks and stones of all sizes, which appeared to have been exposed to a great fire, where they seemed to have acquired a black color and porous texture. Several shrivelled species of grasses grew among these stones, and softened the desolate appearance of the country. The farther they advanced, the more ruinous the face of the country seemed to be. The roads were intolerably rugged, and filled with heaps of volcanic stones, among which the Europeans could not make their way but with the greatest difficulty; but the natives leaped from one stone to another with surprising agility and ease. As they went northward along the island, they found the ground still of the same nature; till at last they met with a large rock of black melted lava, which seemed to contain some iron, and on which was neither soil nor grass, nor any mark of vegetation. Notwithstanding this general barrenness, however, there are several large tracts covered with cultivated soil, which produces potatoes of a gold yellow color, as sweet as carrots, plantains, and sugar-canes. The soil is a dry hard clay; and the inhabitants use the grass which grows between the stones in other parts of the island as a manure, and for preserving their vegetables when young from the heat of the sun. The most remarkable curiosity belonging to this island is a number of colossal statues; of which however very few remain entire. These statues are placed only on the sea-coast. On the east side of the island were seen the ruins of three platforms of stone work, on each of which had stood four of these large statues; but they were all fallen down from two of them, and one from the third: they were broken or defaced by the fall. One that had fallen measured fifteen feet in length, and six broad over the shoulders: each statue had on its head a large cylindric stone of a red color, wrought perfectly round. Others were found that measured nearly twenty-seven feet, and upwards of eight feet over the shoulders; and a still larger one was seen standing, the shade of which was sufficient to shelter all the party, consisting of nearly fifty persons, from the heat of the sun. The workmanship is rude, but not bad, nor are the features of the face ill formed; the ears are long, according to the distortion practised in the country, and the bodies have hardly any thing of a human figure about them. The water of this island is in general brackish, there being only one well perfectly fresh, which is towards the east.

ıe people are of a brown color and middle size. general they are rather thin; go entirely ked; and have punctures on their bodies, a stom common to all the inhabitants of the uth Sea Islands. Their greatest singularity is size of their ears, the lobe of which is so etched out that it almost rests on their shoulder; l is pierced with a very large hole, capable of nitting four or five fingers with ease. The ef ornaments for their ears are the white down feathers, and rings made of the leaf of the sugar-ıe, which is very elastic, and for this purpose rolled up like a watch-spring. Some were n clothed in the same cloth used in Otaheite, ged of a bright orange color with turmeric. t the most surprising circumstance with re-d to these people, is the apparent scarcity of men among them. The nicest calculation that ıld be made never brought the number of in-ıitants in this island to be above 700, and of se the females bore no proportion in number he males. Either they have but few females, lse their women were restrained from appear-during the stay of the ship. Those who ap-ıred were of a very loose description. The ellings of the natives are in general low miser-e huts, very small, and scarcely capable of taining ten persons; but there are some of acious size, constructed in the form of an in-ted canoe, fifty or sixty feet long, and ten or lve broad, with several entrances on one side; rcely any of these exceed three feet in height width. In addition they have also a kind of terraneous dwellings. Their canoes are few, none capable of carrying above four men: swimming off to vessels, they support them-es on a matting of sugar-canes, neatly covered h rushes, four feet and a half long by fifteen ıes broad. The workmanship is tolerably l executed. Voyagers have found them ac-ıplished thieves. Fish are not plentiful on coast; land and sea birds are far from numer-; the seal is the only quadruped that has n seen here. Easter Island is thirty-six miles circumference. Long. 109° 46′ W., lat. 5′ S.

East Main, that part of Labrador, or New tain, which extends eastward of James's Bay.

East Main River, a river of Canada, also led Slude, which enters James's Bay, in lat. 8′ N., long. 78° 45′ W.

East India Company. See India.

EASTON, a town of the United States, in ryland, the capital of Talbot county, formerly ned Talbot Court-House. It is seated on the t side of Chesapeake Bay, near the branches of river Treadhaven, twelve miles above its con-nce with the Choptank; five miles south by t of Williamsburgh; fifty south-east by south Baltimore, and 118 south-west of Philadelphia.

Easton, or Eastown, a township of Massa-setts, in Bristol county, famous for its manu-ures in iron and steel, and a manufacture of eed oil. Easton is seated near the head of river Raynham, six miles north-west of the n so named, and twelve west of Bridgewater. o a township of New York, in Washington nty; and a town of Pennsylvania, the capital Northampton county, seated at the mouth of the Lehigh, on the west side of the Delaware. Twelve miles north-east of Bethlehem, and seventy north of Philadelphia.

East River, a river, or channel, of North America, between Long Island and New York Island, and between the state of Connecticut and Long Island. It is often called Long Island Sound. 2. A river of West Florida, which runs into Pensacola Bay, in long. 86° 50′ W., lat. 30° 34′ N. 3. A river of America, which runs into the West River, in the province of Maine, in long. 67° 20′ W., lat. 44° 48′ N.

EAT, *v.a.* & *v. n.*
Eat'able, *adj.* & *n. s.*
Ea'ter, *n. s*
Ea'ting,
Ea'ting-house.

} Sax. eatan; Belg. *eetan;* Goth. *etan*, or *itan;* Sw. *æta;* Erse. *eta;* Lat. *edere*; Gr. *εδειν*. To take food; masticate and swallow food; devour: hence, generally, to gnaw; consume; wear or waste away; corrode. Eatable means that may be, or any thing that is, eaten.

And alle *eeten* the same spiritual mete, and alle drunken the same spiritual drynk, thei drunken of the same spyritual stoon folewynge hem, and that stoon was Crist. *Wiclif.* 1 *Cor.* x.

Locusts shall *eat* the residue of that which is escaped from the hail, and shall *eat* every tree which groweth. *Exodus* x. 4.

The righteous *eateth* to the satisfying of his soul, but the belly of the wicked shall want. *Prov.* xiii. 25.

And will not suffren hem by non assent,
Neyther to ben yberied ne ybrent,
But maketh houndes *ete* hem in despyte.
Chaucer. Cant. Tales.

And as of old time God decreed his wondrous benefits of the deliverance of his people, to be kept in memory by the *eating* of the passover, with his rites and ceremonies. *Homilies of the Church.*

Thou art past the tyrant's stroke;
Care no more to cloath and *eat*.
Shakspeare. Cymbeline.

Thou best of gold art worst of gold;
Other less fine in carat is more precious,
Preserving life in medicine potable:
But thou, most fine, most honored, most renowned,
Hast *eat* thy bearer up. *Id. Henry IV.*

A knave, a rascal, an *eater* of broken meats. *Id.*

The difference between a rich man and a poor man is this—the former *eats* when he pleases, and the latter when he can get it. *Sir W. Raleigh.*

Other states cannot be accused for not staying for the first blow, or for not accepting Polyphemus's courtesy, to be the last that shall be *eaten* up. *Bacon's War with Spain.*

The Caribees and the cannibal, almost all, are *eaters* of man's flesh. *Abbot's Description of the World.*

They cannot hold, but burst out those words which afterwards they are forced to *eat*. *Hakewill. On Providence.*

As if the lotus grew only here, the virtue of whose fruit is to cause the *eaters* an oblivion of all others oils. *Howell.*

As riches increase, says Solomon, so do the mouths that devour them. The master's mouth has no more than before. The owner, methinks, is like Oenus in the fable, who is perpetually winding a rope of hay, and an ass at the end perpetually *eating* it. *Cowley.*

If the taste of this fruit maketh the *eaters* like gods, why remainest thou a beast? *Browne's Vulgar Errours.*

Eating cares,
Lydian airs. *Milton.*

Credit were not to be lost
By a brave knight-errant of the post,
That *eats*, perfidiously, his word,
And swears his ears through a two inch board.
Hudibras.

They entail a secret curse upon their estates, which does either insensibly waste and consume, or *eat* out the heart and comfort of it. *Tillotson.*

An hungry traveller stept into an *eating-house* for his dinner. *L'Estrange.*

He that will not *eat* till he has a demonstration that it will nourish him, he that will not stir till he infallibly knows the business he goes about will succeed, will have little else to do but to sit still and perish. *Locke.*

The plague of sin has even altered his nature, and *eaten* into his very essentials. *South.*

If you all sorts of persons would engage,
Suit well your *eatables* to every age.
King's Art of Cookery.

But, thanks to my indulgent stars, I *eat*,
Since I have found the secret to be great. *Prior.*

A prince's court *eats* too much into the income of a poor state. *Addison's Italy.*

Even wormwood, *eat* with bread, will not bite, because it is mixed with a great quantity of spittle. *Arbuthnot on Aliments.*

There arises a necessity of keeping the surface even, either by pressure or *eating* medicines, that the eminence of the flesh may not resist the fibres of the skin in their tendency to cover the wound. *Sharp's Surgery.*

If a person unaccustomed to much salt should *eat* a couple of red herrings, his insensible perspiration will be so much increased by the stimulus of the salt, that he will find it necessary in about two hours to drink a quart of water. *Darwin.*

EATH, *adj.* & *adv.* Sax. eaŏ. Easy; not difficult. An old word.

Where ease abounds, it's *eath* to do amiss.
Faerie Queene.

Who hath the world not try'd,
From the right way full *eath* may wander wide.
Hubbard's Tale.

What works not beauty, man's relenting mind
Is *eath* to move with plaints and shews of woe.
Fairfax.

The way was straight and *eath*. *Id.*

EATON, or ETON, a town of England, in Buckinghamshire. See ETON.

EATAW, a small river of South Carolina, which runs into the Santee. Near the source of this river, in 1781, a battle was fought between the British, under colonel Stuart, and the Americans under general Greene; in which the former had 500 men killed and wounded; both sides claiming the victory.

EAU DE LUCE, a fragrant alkaline liquor which was some years ago in great repute. We are told by Mr. Nicholson, in his Journal, that, having learned from a philosophical friend that the common recipes for making this compound did not succeed, and that the use of mastic in it had hitherto been kept a secret, he made the following experiments to procure a good eau de luce. 'One dram of the rectified oil of amber was dissolved in four ounces of the strongest ardent spirit of the shops; its specific gravity being ·840 at 60° of Fahrenheit. A portion of the clear spirit was poured upon a larger quantity of fine powdered mastic than it was judged could be taken up. This was occasionally agitated without heat; by which means the gum resin was for the most part gradually dissolved. One part of the oily solution was poured into a phial, and to this was added one part of the solution of mastic. No opacity or other change appeared. Four parts of strong caustic volatile alkali were then poured in and immediately shaken. The fluid was of a dense opaque white color, affording a slight ruddy tinge when the light was seen through a thin portion of it. In a second mixture, four parts of the alkali were added to one of the solution of mastic; it appeared of a less dense and more yellowish white than the former mixture. More of the gum resinous solution was then poured in; but it still appeared less opaque than that mixture. It was ruddy by transmitted light. The last experiment was repeated with the oily solution instead of that of mastic. The white was much less dense than either of the foregoing compounds, and the requisite opacity was not given by augmenting the dose of the oily solution. No ruddiness nor other remarkable appearance was seen by transmitted light. These mixtures were left at repose for two days; no separation appeared in either of the compounds containing mastic; the compound, consisting of the oily solution and alkali, became paler by the separation of a cream at the top.' In a subsequent number of the same work we find the following recipe by one of the author's correspondents, who had frequently proved its value by experience. 'Digest ten or twelve grains of the whitest pieces of mastic, selected for this purpose and powdered, in two ounces of alcohol; and, when nearly dissolved, add twenty grains of elemi. When both the resins are dissolved, add ten or fifteen drops of rectified oil of amber, and fifteen or twenty of essence of bergamot: shake the whole well together, and let the fæces subside. The solution will be of a pale amber color. It is to be added in very small portions to the best aqua ammoniæ puræ, until it assumes a milky whiteness, shaking the phial well after each addition, as directed by Macquer. The strength and causticity of the ammoniac are of essential consequence. If, upon the addition of the first drop or two of the tincture, a dense opaque coagulated precipitate is formed, not much unlike that which appears on dropping a solution of silver into water slightly impregnated with common salt, it is too strong, and must be diluted with alcohol. A considerable proportion of the tincture, perhaps one to four, ought to be employed to give the liquor the proper degree of opacity.'

EAVES, *n. s. plur.* } Sax. efese, or epese;
EAVES'DROP, *v. n.* } the descents or descend-
EAVES'DROPPER, *n. s.* } ing parts of a thing: old Fr. *aive*, *eve*, was also water. The edges of a roof; and, colloquially, the water that drops from them. To eavesdrop is likewise to catch what comes from the eaves, or to listen under windows.

Under our tents I'll play the *eavesdropper*,
To hear if any mean to shrink from me.
Shakspeare.

His tears run down his beard like winter drops
From *eaves* of reeds. *Id. Tempest.*

Every night he comes
With music of all sorts, and songs composed
To her unworthiness: it nothing steads us
To chide him from our *eaves*; for he persists,
As if his life lay on't.
Id. All's Well that Ends Well.

If in the beginning of winter the drops of the *eaves* of houses come more slowly down than they use, it portendeth a hard and frosty winter. *Bacon.*

Ushered with a shower still,
When the gust hath blown his fill,
Ending on the rustling leaves
With minute drops from off the *eaves*. *Milton.*

The icicles hang down from the *eaves* of houses.
Woodward.

EAVES DROPPERS are called evil members of the commonwealth, in the stat. of West. 1. c. 33. They may be punished either in the court-leet by way of presentment and fine, or in the quarter-sessions by indictment and binding to good behaviour.

EBAL, in ancient geography, a mountain of Samaria, near Shechem. Between it and Gerizim on the south side of it, there is a valley of 200 paces. On Ebal and Gerizim (the former extremely bare and barren, and the latter extremely verdant and fertile), the Hebrews were ranked, six tribes on each, who echoed Amen to the blessings and curses pronounced by the priests in the intervening valley. Deut. xxvii, xxviii. Josh. viii. 30, &c.

EBB, *n. s.* & *v. n.* } Belg. *ebbe;* Sax. ebba;
EBB'ING, *n. s.* } Swed. *ebb;* Fr. *ebe*, descent. The reflux of the tide; and as a verb to flow back, as the tide toward the sea. Hence, metaphorically, decline; decay; deterioration: and to fall off; decline; or waste away.

Thou pinchist at my mutabilitie,
For I the lent a droppe of my richesse,
And now me likith to withdrawin me,
Why shouldist thou my roialtie oppresse?
The se maie *ebbe* and flowin more and lesse,
The welkin hath might to shine, rain, and haile.
Chaucer.

You have finished all the war, and brought all things to that low *ebb* which you speak of.
Spenser on Ireland.

Though my tide of blood
Hath proudly flowed in vanity till now,
Now it doth turn and *ebb* back to the sea.
Shakspeare.

This tide of man's life, after it once turneth and declineth, ever runneth with a perpetual *ebb* and falling stream, but never floweth again.
Raleigh's History.

Since such Love's natural station is, may still
My love descend, and journeying down the hill;
Not panting after growing beauties; so
I shall *ebb* on with them who homeward go.
Donne.

The clear sun on his wide watery glass
Gazed hot, and of the fresh wave largely drew,
As after thirst; which made their flowing shrink
From standing lake to tripping *ebb*, that stole
With soft foot towards the deep. *Milton.*

Then with so swift an *ebb* the flood drove backward,
It slipt from underneath the scaly herd.
Dryden's All for Love.

From thence the tide of fortune left their shore,
And *ebb'd* much faster than it flowed before.
Id. Æneid.

Thus all the treasure of our flowing years,
Our *ebb* of life for ever takes away. *Roscommon.*

But oh, he *ebbs!* the smiling waves decay!
For ever lovely stream, for ever stay! *Halifax.*

Hither the seas at stated times resort,
And shove the loaden vessels into port;
Then with a gentle *ebb* retire again,
And render back their cargo to the main.
Addison on Italy.

What is it he aspires to?
Is it not this? To shed the slow remains,
His last poor *ebb* of blood in your defence.
Id. Cato.

I do not think a philosopher obliged to account for every phenomenon in nature, or drown himself with Aristotle for not being able to solve the *ebbing* and flowing of the tide. *Swift.*

Games of chance are traps to catch school boy novices and gaping country squires, who begin with a guinea, and end with a mortgage; whilst the old stagers in the game keep their passions in check, watch the *ebb* and flow of fortune, till the booby they are pillaging sees his acres melt at every cast.
Cumberland.

EBBSFLEET, anciently Wyppedsfleet, a hamlet of the Isle of Thanet, Kent, at the mouth of the river Stour, where the Saxons landed in 447 under Hengist and Horsa. In 463 a celebrated battle was fought in this vicinity between the Britons and Saxons, when the former were defeated. The Saxon leader Wypped, who is said to have fallen on this occasion, gave name to this hamlet.

EBENEZER, (Heb. the stone of help), the name of a field where the Philistines defeated the Hebrews, and seized on the sacred ark; and where afterwards, at Samuel's request, God discomfited the Philistines with thunder and hail, and gave the Hebrews a noted deliverance. On this occasion Samuel set up a stone, and gave it this designation, to mark that the Lord had helped them; and from it the whole field adjacent received its name. It is said to have been about forty miles south-west of Shiloh. 1 Sam. iv. 1., and vii. 12.

EBENEZER, a town of the United States, in Georgia, the capital of Effingham county, seated on the south-west bank of Savannah River. Twenty-five miles N.N.W. of Savannah, seventy-five south-east of Louisville, and 860 south-west of Philadelphia.

EBENUS, the ebony tree. See AMERIMNUM.

EBERSBERG, a town of Upper Austria, situated on the river, and in the circle of the Traun, which is here divided into many branches, and crossed by a bridge of great length. Here is a castle said to have been built in the year 900; and in the neighbourhood was fought a severe action between the Austrians and French in May, 1809. It is eight miles north-west of Ens.

EBERSDORF, a small town of Lower Austria, on the right bank of the Danube, where Buonaparte had his head-quarters previous to the battle of Aspern in May, 1809. Inhabitants 1165. Eight miles E.S.E. of Vienna.

EBERSTHAL, or EBERSTAL, a town of Germany, in the circle of the Lower Rhine, and electorate of Mentz, two miles south of Krautheim; but on which side of the Rhine, and

consequently whether annexed to the French republic or not, we cannot discover, as neither of these towns is to be found in the maps.

EBION, the author of the heresy of the Ebionites, was a disciple of Cerinthus and his successor. To the errors of his master, he had added new opinions of his own. He began his preaching in Judea; he taught in Asia, and even at Rome. His tenets infected the Isle of Cyprus. St. John opposed both Cerinthus and Ebion in Asia; and it is thought that he wrote his gospel, in the year 97, particularly against this heresy.

EBIONITES, ancient heretics, who rose in the very first age of the church, and formed themselves into a sect in the second century, denying the divinity of Jesus Christ. Epiphanius gives a long and exact account of the origin of the Ebionites, making them to have risen after the destruction of Jerusalem, when the first Christians, called Nazarenes, went out of it to live at Pella. The Ebionites seem to have been a branch of Nazarenes: Origen distinguishes two kinds of Ebionites; the one believing that Jesus Christ was born of a virgin, and the other that he was born after the manner of other men. The first were orthodox in every thing, except that to the Christian doctrine they joined the ceremonies of the Jewish law, with the Jews, Samaritans, and Nazarenes; together with the traditions of the Pharisees. They differed from the Nazarenes, chiefly as to what regards the authority of the sacred writings; for the Nazarenes received all for scripture contained in the Jewish canon; whereas the Ebionites rejected all the prophets, and all St. Paul's epistles. They received nothing of the Old Testament but the Pentateuch; which should intimate them to have descended rather from the Samaritans than from the Jews. They agreed with the Nazarenes in using the Hebrew gospel of St. Matthew, otherwise called the Gospel of the Twelve Apostles; but they had corrupted their copy in many places; and, particularly, had left out the genealogy of our Saviour, which was preserved entire in that of the Nazarenes, and even in those used by the Cerinthians. Some, however, have made this gospel canonical, and of greater value than our present Greek gospel of St. Matthew: See NAZARENES. Besides the Hebrew gospel of St. Matthew, the Ebionites had adopted several other books, under the names of St. James, John, and the other apostles: they also made use of the Travels of St. Peter, which are supposed to have been written by St. Clement.

EB'ON, *n. s.* } Also formerly written EBEN.
EB'ONY, } Lat. *ebenus*; Fr. *ebene*, of Gr. εβενος, ab Heb. הבן, Minsheu. A particularly hard, black, and heavy wood: hence any thing remarkably black or dark.

If the wood be very hard, as *ebony*, or lignum vitæ, they are to turn, they use not the same tools they do for soft woods. *Moxon's Mech. Exer.*

Oft by the winds extinct the signal lies,
Ere night has half rolled round her *ebon* throne.
Gay.

And now the sorceress bares her shrivelled hand,
And circles thrice in air her *ebon* wand;
Flushed with new life descending statues talk,
The pliant marble softening as they walk. *Darwin.*

There was no want of lofty mirrors, and
The tables most of *ebony* inlaid
With mother-of-pearl or ivory, stood at hand,
Or were of tortoise-shell or rare woods made.
Byron.

EBONY. There are divers kinds of ebony: the most usual among us are black, red, and green, but authors and travellers give very different accounts of the tree that yields this valuable wood. The real tree, however, from which it is obtained is the AMERIMNUM EBENUS of the West Indies, which see Black ebony is much preferred to that of other colors. The best is a jet black, free of veins and rind, very massive, astringent, and of an acrid pungent taste. Its rind, infused in water, is said to purge pituita, and cure venereal disorders; whence Matthiolus took guaiacum for a sort of ebony. It yields an agreeable perfume when laid on burning coals: when green, it readily takes fire from the abundance of its oil. The Indians make statues of their gods, and sceptres for their princes, of this wood. It was first brought to Rome by Pompey, after he had subdued Mithridates. It is now much less used among us than anciently; since the discovery of so many ways of giving other hard woods a black color. The cabinet-makers, inlayers, &c., make pear-tree and other woods pass for ebony, by giving them a black color, by a few washes of a hot decoction of galls; and when dry, adding ink, and polishing them with a stiff brush, and a little hot wax.

EBORACUM, in ancient geography, a famous city of the Brigantes in Britain, now called York. The emperors Septimus Severus and Constantius Chlorus resided and died in it. It was a Roman colony, and the station of the Legio Sexta Victrix. Its name in the ancient British language is Caer-frock, or Caer-effroc.

EBRBUHARITES, a sect among the Mahommedans, so named from their founder Ebrbuhar, a disciple of Naschibendi. They profess great sanctity, with a total dereliction of all worldly things; yet they are regarded by the other Mussulmans, as little better than heretics, because they do not go in pilgrimage to Mecca. From this labor they excuse themselves, by pretending that the purity of their souls, their sublime contemplations, extacies, &c., show them Mecca and Mahomet's tomb without stirring from their cells.

EBRI'ETY, *n. s.* } Fr. *ebrieté*; Ital. *ebrieta*;
EBRIOS'ITY, *n. s.* } Lat. *ebrietas*. Drunkenness. Ebriosity, Lat. *ebriositas*, is continual drunkenness.

That religion which excuseth Noah in surprisal, will neither acquit *ebriosity* nor *ebriety* in their intended perversion. *Browne.*

Here laughs *Ebriety* more fell than arms,
And thins the nations with her fatal charms,
With Gout, and Hydrops groaning in her train,
And cold Debility, and grinning Pain. *Darwin.*

EBRO, a large river of Spain, the ancient Iberus, which rises in the mountains of Santillane, on the confines of Old Castile, runs through Biscay and Arragon, passes by Saragossa, and, continuing its course through Catalonia, falls

vith great rapidity into the Mediterranean, about wenty miles below Tortosa. Of its two mouths he one to the south is artificial, and of easier ntrance than the other, which is nearly choked vith mud. The stream is in general very rapid, nd little adapted for navigation, being full of ocks and shoals: it is, however, useful in supplying the great canals of Arragon with water. ts bed is said to have been less obstructed in ncient times.

EBUL'LIENCY, *n. s.* } Lat. *ebullio*, of *bulla*,
EBUL'LIENT, *adj.* } a bubble. Rising or
EBULLI'TION, *n. s.* } boiling up in bubles. State of effervescence or swelling.

The dissolution of gold and silver disagree; so that n their mixture there is great *ebullition*, darkness, and, n the end, a precipitation of a black powder. *Bacon.*

Iron, in aqua fortis, will fall into *ebullition* with oise and emication; as also a crasse and fumid exhaation, caused from the combat of the sulphur of iron vith the acid and nitrous spirits of aqua fortis.
Browne's Vulgar Errours.

When aqua fortis, or spirit of vitriol, poured upon ilings of iron, dissolves the filings with a great heat nd *ebullition*, is not the heat and *ebullition* effected by violent motion of the parts; and does not their otion argue, that the acid parts of the liquor rush wards the parts of the metal with violence, and run rcibly into its pores, till they get between its outmost articles and the main mass of the metal? *Newton.*

A violent cold, as well as heat, may be produced y this *ebullition*, for if sal ammoniack, or any pure olatile alkali, dissolved in water, be mixed with an cid, an *ebullition*, with a greater degree of cold, ill ensue. *Arbuthnot on Aliments.*

Song second was the *ebullition* of that passion which nded the forementioned school business. *Burns.*

EBUSUS, in ancient geography, the greater of he two islands called Pityusæ, in the Mediterranean, near the east coast of Spain, south-west f Majorca. Famous for its pastures and for gs. Now called Ivica.

ECASTOR, or MECASTOR, in antiquity, an ath wherein Castor was invoked. It was a custom for men never to swear by Castor, nor the omen by Pollux.

ECBATANA, in ancient geography, the royal esidence and capital of Media, built by Deioces ing of the Medes, according to Herodotus: liny says, by Seleucus; but that could not be, ecause it is mentioned by Demosthenes. It as situated on a gentle declivity, twelve stadia om Mount Orontes, amd was in compass 150 tadia. Here stood the royal treasury and tombs. t was an open unwalled town, but had a very trong citadel, encompassed with seven walls vithin, and rising above each other. The extent f the utmost was equal to the whole extent of Athens, according to Herodotus; the situation avoring this construction, as being a gentle ascent, nd each wall was of a different color.

ECCENTRIC, *adj.* & *n. s.* } Fr. *eccentrique*; Ital. Span.
ECCEN'TRICAL, } and Port. *eccenECCENTRI'CITY, *n. s.* } trico*; Lat. *eccentricus*; Gr. εκκεντρικος, i. e. εκ, xtra, et κεντρον, centrum. Without, or deviating from, a centre; hence, metaphorically, irregular; anomalous. Eccentricity is oddity; habit f deviation from established rules or methods.

Whatsoever affairs pass such a man's hands, he crooketh them to his own ends; which must needs be often *eccentrick* to the ends of his master.
Bacon's Essays.

Astronomers, to solve the phænomena, framed to their conceits *eccentricks* and epicycles, and a wonderful engine of orbs. *Bacon.*

The duke at his return from his *eccentricity*, for so I account favorites abroad, met no good news.
Wotton.

This motion, like others of the times, seems *eccentrick* and irregular. *King Charles.*

In regard of *eccentricity*, and the epicycle wherein it moveth, the motion of the moon is unequal. *Browne.*

They build, unbuild, contrive,
To save appearances: they gird the sphere
With centrick and *eccentrick*, scribbled o'er,
Cycle, and epicycle, orb in orb. *Milton.*

By reason of the sun's *eccentricity* to the earth, and obliquity to the equator, he appears to us to move unequally. *Holder.*

A character of an *eccentrick* virtue, is the more exact image of human life, because it is not wholly exempted from its frailties. *Dryden.*

Then from whate'er we can to sense produce,
Common and plain, or wondrous and abstruse,
From nature's constant or *eccentric* laws,
The thoughtful soul this general inference draws,
That an effect must presuppose a cause. *Prior.*

How few are found with real talents blest!
Fewer with nature's gifts contented rest,
Man from his sphere *eccentric* starts astray;
All hunt for fame, but most mistake the way.
Churchill.

Whence is it that planets 'move all one and the same way in orbs concentrick, while comets move all manner of ways in orbs very *eccentrick*?
Newton's Opticks.

Eccentricity of the earth is the distance between the focus and the centre of the earth's elliptick orbit.
Harris.

But on examining it more nearly, you find much *eccentricity* and confusion. It is not a monarchy in strictness. *Burke.*

Try now the merits of this blessed exchange
Of modest truth for wit's *eccentric* range. *Cowper.*

ECCHELLENSIS (Abraham), a learned Maronite, employed in the Paris edition of the Polyglott Bible. He, however, quarrelled with two of his coadjutors, and was then employed in making an Arabic translation of the Scriptures, at Rome. While he was professor of the Oriental languages at Rome, he was chosen by the great duke Ferdinand II., to translate from Arabic into Latin, the fifth, sixth, and seventh of Apollonius's Conics, in which he was assisted by John Alphonso Borelli, who added commentaries to them. He died at Rome, in 1664.

ECCHYMO'SIS, *n. s.* Εκχυμωσις. Livid spots or blotches in the skin, made by extravasated blood.

Ecchymosis may be defined an extravasation of the blood in or under the skin, the skin remaining whole. Laxations are accompanied with tumour and *ecchymosis*. *Wiseman.*

ECCHYMOSIS; from εκχυω, to pour out, or from εξ, out of, and χυμος, juice; an effusion of humors from their respective vessels under the integuments; or, as Paulus Ægineta says, 'When the flesh is bruised by the violent collision of any object, and its small veins broken, and the blood is gradually discharged from them.' This blood,

when collected under the skin is called an ecchymosis, the skin in the mean time remaining entire; sometimes a tumor is formed by it, which is soft and livid, and generally without pain. If the quantity of blood is not considerable, it is usually resorbed; if much, it suppurates; it rarely happens that any farther inconvenience follows; though, in a very bad habit of body, a mortification may be the result.

ECCLESHALL, a market town of Staffordshire, pleasantly situated on a branch of the river Sow, seven miles and a half north-west of Stafford, and 148 north-west from London. The houses are neat, and there is a good church and charity school. It is supposed to be named from the Latin word ecclesia, the bishop of Litchfield having formerly had a palace here. In the civil war it was garrisoned for the king, but, being afterwards taken by the parliamentary forces, it was nearly destroyed; after which it was rebuilt by bishop Lloyd. Market on Friday.

ECCLESIASTES, a canonical book of the Old Testament, the design of which is to show the vanity of all sublunary things. It was composed by Solomon; who enumerates the several objects on which men place their happiness, and then shows the insufficiency of all worldly enjoyments. The Talmudists make king Hezekiah to be the author of it; Grotius ascribes it to Zorobabel, and others to Isaiah; but the generality of commentators believe this book to be the produce of Solomon's repentance, after he had experienced the pleasures, follies, and vanities of life.

ECCLESIASTIC, *adj.* & *n. s.* } Lat. *ecclesiasticus*; of,
ECCLESIAS'TICAL, *adj.* } or relating to, the church.

Is discipline an *ecclesiastical* matter or civil? If an *ecclesiastical*, it must belong to the duty of the ministers. *Hooker.*

The ambition of the *ecclesiasticks* destroyed the purity of the church. *Burnet's Theory.*

Clergymen, otherwise little fond of obscure terms, yet in their sermons are liberal of those which they find in *ecclesiastical* writers. *Swift.*

A church of England man has a true veneration for the scheme established among us of *ecclesiastick* government. *Id.*

It was justly so called; being thus distinguished, not only from the religion of Moses, the sanctions whereof related to the present life, but also from every human scheme of moral, political, or *ecclesiastical* legislation. *Beattie.*

ECCLESIASTICAL COURTS. In the time of the Anglo-Saxons, there was no distinction between the lay and the ecclesiastical jurisdiction; the county court was as much a spiritual as a temporal tribunal; the rights of the church were ascertained and asserted at the same time, and by the same judges, as the rights of the laity. For this purpose the bishop of the diocese, and the alderman, or the sheriff of the county, sat together in the county court, and had there the cognizance of all causes, as well ecclesiastical as civil; a superior deference being paid to the bishop's opinion in spiritual matters, and to that of the lay judges in temporal: and thus the presence of the bishop added weight and reverence to the sheriff's proceedings. But it soon became an established maxim in the papal system of policy, that all the ecclesiastical persons, and causes, should be entirely subject to ecclesiastical jurisdiction only; which was alleged to be lodged in the pope, by divine indefeasible right and investiture from Christ himself, and derived from the pope to all inferior tribunals. It was not, however, till after the Norman conquest, that this doctrine was received in England; when William I., (whose title was espoused by the monasteries which he endowed, and by the foreign clergy whom he brought over from France and Italy, and planted in the best preferments of the English church), established this fatal encroachment, and separated the ecclesiastical court from the civil. King Henry I., at his accession, among other restorations of the laws of king Edward the Confessor, revived this of the union of the civil and ecclesiastical courts. This, however, was opposed by the popish clergy, who, under the guidance of that arrogant prelate archbishop Anselm, very early attacked a measure that put them on a level with the profane laity; and therefore in their synod at Westminster, 3 Hen. I., they ordained, that no bishop should attend the discussion of temporal causes; which soon dissolved this newly effected union. And when, upon the death of Henry I., Stephen was brought in and supported by the clergy, one article of the oath imposed upon him was, that ecclesiastical persons and causes should be subject only to the bishop's jurisdiction. As about that time the contest began, about the laws of England and those of Rome, the temporal courts adhering to the former, and the spiritual adopting the latter, as their rule, this widened the breach, and made a coalition afterwards impracticable; which probably would otherwise have been effected at the reformation. Ecclesiastical courts are various; as the ARCHDEACON'S COURT, the Court of ARCHES, the CONSISTORY, the PECULIARS, the PREROGATIVE, and the great court of appeal in all ecclesiastical causes, viz. the Court of DELEGATES. See these articles. In these spiritual courts, it must be acknowledged to their honor, that though they continue to decide many questions of temporal cognizance, yet justice is in general so impartially administered, that the boundaries of their power are well known, and no material inconvenience arises from this jurisdiction continuing in the ancient channel. Their ordinary course of proceeding is, first, by citation, to call the party injuring before them. Then by libel, or by articles drawn out in a formal allegation, to set forth the complainant's ground of complaint. To this succeeds the defendant's answer upon oath; when, if he denies or extenuates the charge, they proceed to proofs by witnesses examined, and their depositions taken down in writing by an officer of the court. If the defendant has any circumstances to offer, in his defence, he must propound them in what is called his defensive allegation, to which he is entitled in his turn to the plaintiff's answer upon oath, and may from thence proceed to proofs as well as his antagonist. The canonical doctrine of purgation, whereby the parties were obliged to answer upon oath to any matter, however criminal, that might be objected against them (though long ago over ruled in the court of chancery, the

genius of the English law having broken through the bondage imposed on it by its clerical chancellors, and asserted the doctrines of judicial as well as civil liberty,) continued till the middle of the seventeenth century, to be upheld by the spiritual courts; when the legislature was obliged to interpose, to teach them a lesson of similar moderation. By the statute of 13 Car. II. cap. 2, it is enacted, that it shall not be lawful for any bishop, or ecclesiastical judge, to administer to any person the oath usually called the oath ex officio, or any other oath whereby he may be compelled to confess, accuse, or purge himself of any criminal matter, whereby he may be liable to any censure or punishment. When all the pleadings and proofs are concluded, they are referred to the consideration, not of a jury, but of a single judge; who takes information by hearing advocates on both sides, and thereupon forms his interlocutory decree, or definitive sentence, at his own discretion: from which there generally lies an appeal to the several stages mentioned in the articles above referred to; though, if the same be not appealed from by him in fifteen days, it is final by the statute 25 Hen. VIII. cap. 19.

Ecclesiastical State, in geography, a name often given to the pope's dominions in Italy. They consisted before the late revolutions of the provinces of Campagna, St. Peter's Patrimony, Umbria, Ancona, Urbino, Romagna, Bologna, and Ferrara. The first five of these were erected by the French into the Roman republic; the last three into the Cisalpine. Avignon, and Venaisin in France, became included in the French republic. See Papal States.

ECCLESIASTICUS, an apocryphal book, so called, from its being read in the church, ecclesia, as a book of piety and instruction, but not of infallible authority. The author was a Jew, called Jesus, or Joshua, the son of Sirach. The Greeks call it the Wisdom of the son of Sirach.

ECCOPROTICKS, *n. s.* Εκ and κοπρος. Such medicines as gently purge the belly, so as to bring away no more than the natural excrements lodged in the intestines.

The body ought to be maintained in its daily excretions by such means as are *eccoprotick*.
Harvey on the Plague.

ECHEMIN, a river of Lower Canada, rising in the mountains to the southward of the St. Laurence, into which it falls, two miles above Quebec. The margin is a flat rock, with only a shallow covering of soil. But there is some good land in its neighbourhood.

ECHENEIS, the remora, in ichthyology, a genus belonging to the order of thoracici. The head is flat, naked, depressed, and marked with a number of transverse ridges; it has ten rays in the branchiostege membrane, and the body is naked. There are three species, of which the following one is the most worthy of note:—

The remora, the sucking fish with a forked tail, and eighteen striæ on the head. This species is often found adhering so strongly to the sides of the sharks and other great fish, by means of the structure of its head, as to be got off with difficulty. It was believed, by all the ancients, to have most wonderful powers, and to be able, by adhering to the bottom, to arrest the motion of a ship in its fullest course; and, in love affairs, to deaden the warmest affections of both sexes.

ECHEVIN, in the old French and Dutch polity, a magistrate elected by the inhabitants of a city or town, to take care of their common concerns, and the decoration and cleanliness of the city. At Paris, before the revolution, there were a prevôt and four echevins; in other towns, a mayor and echevins. At Amsterdam there were nine echevins; and at Rotterdam, seven. In France they took cognizance of rents, taxes, the navigation of rivers, &c. In Holland they judged of civil and criminal causes; and, if the criminal confessed himself guilty, they could see their sentence executed without appeal.

ECHINADES, otherwise called the Nisia Islands, a group of islets at the entrance of the gulf of Lepanto, which they almost seem to close on the side of Epirus.

ECHINITES, in natural history, the name by which authors call the fossile centronia, frequently found in our chalk pits. See Centronia.

ECHINOPHORA, in botany, a genus of the digynia order, and pentandria class of plants; natural order forty-fifth, umbellatæ. The male florets are lateral, with the central one hermaphrodite: seed one, sunk into an indurated involucrum. Species two, found on the south coast of Great Britain.

ECHINOPS, in botany, a genus of the polygamia segregata order, and syngenesia class of plants; natural order forty-ninth, compositæ: cal. uniflorous; cor. tubulated, and hermaphrodite; receptacle bristly; pappus indistinct. Species six, natives of the Levant, and south of Europe.

ECHINORINCHUS, a genus of the vermes intestina: the body is round, proboscis cylindrical, retractile, and crowned with hooked prickles. They are found fixed firmly to the viscera of various animals, generally the intestines; and often remain on the same spot during the whole life of the animal; they are mostly gregarious, and are easily distinguished from the tænia by their round inarticulate body. There are forty-eight species, infesting the mammalia, birds, reptiles, and fish.

E'CHINUS, *n. s.* } Lat. A hedge-hog; a
E'CHINATE, *adj.* } shell-fish set with prickles:
E'CHINATED. } in botany, the prickly head, cover of the seed, or top of any plant: in architecture, a member or ornament, taking its name from the roughness of the carving, resembling the prickly rind of a chestnut, or the thorny coat of a hedge-hog. Echinated is bristled, or full of prickles. This ornament is used by modern architects in cornices of the Ionic, Corinthian, and Composite orders; and generally set next to the abacus, being carved with anchors, darts, and ovals or eggs.

An *echinated* pyrites in shape approaches the *echynated* chrystalline balls. *Woodward on Fossils.*

Many nodules of flint resemble in colour as well as in form the shells of the *echinus* or sea-urchin; others resemble some coralloids both in form and color.
Darwin.

Echinus, in zoology, a genus of insects belonging to the order of vermes mollusca. The body is roundish, covered with a bony crust, and

often beset with moveable prickles; and the mouth is below and consists of five valves. There are 108 species, all natives of the sea.

1. E. esculentus, or eatable echinus, is of a hemispherical form, covered with sharp strong spines above half an inch long, commonly of a violet color, moveable, adherent to small tubercles elegantly disposed in rows. These are their instruments of motion by which they change their place. This species is taken in dredging, and often lodges in cavities of rocks just within low-water mark. They are eaten by the poor in many parts of England, and by persons of rank abroad. Anciently they were a favorite dish. They were the first dish in the famous supper of Lentulus, when he was made flamen Martialis, or priest of Mars.

2. E. lacunosus, or oval echinus, is of an oval depressed form; on the top it is of a purple color, marked with a quadrefoil, and the spaces between tuberculated in waved rows; the lower side studded, and divided by two smooth spaces. Length four inches. When clothed it is covered with short thick-set bristles, mixed with very long ones.

3. E. marinus, the sea urchin, has an arched shell varying in its figure in different individuals; and, besides a great number of protuberances, has two remarkable apertures for the mouth and the anus.

Echinus Terrestris, the land urchin. See Erinaceus.

ECHITES, in botany, a genus of the monogynia order, and pentandria class of plants; natural order thirtieth, contortæ. There are two long and straight follicles: seed pappous; cor. funnel-shaped, with the throat naked.

Echites Corymbosa, a species of this genus, is said to yield the caoutchouc, or elastic gum according to Jacquin. See Gum, Elastic.

ECHIUM, viper's bugloss, in botany, a genus of the monogynia order, and pentandria class of plants; natural order forty-first, asperifoliæ: cor. is irregular, with the throat naked. Species twenty-seven; none of them have any remarkable property except the E. vulgari, or common bugloss, the flowers of which are very grateful to bees. It is a native of many parts of Britain. The stem is rough with hairs and tubercles. The leaves are spear-shaped, and rough with hair. The flowers come out in lateral spikes. They are first red, afterwards blue; sometimes purple or white. Cows and sheep are not fond of the plant; horses and goats refuse it.

ECHO, *n. s.*, *v. n.*, & *v. a.* Span. *echo*, *eco*; Fr. and Port. *echo*; Lat. *echo*; Gr. ηχω. A resounding or giving again of the voice or any sound. The sound returned. As a neuter verb, to resound; be sounded back: as a verb active to send back, return, what has been uttered.

At the parting
All the church *echoed*.
Shakspeare. Taming of the Shrew.

Babbling *echo* mocks the hounds,
Replying shrilly to the well-tuned horns,
As if a double hunt were heard at once. *Id.*

Wilt thou hunt?
Thy hounds shall make the welkin answer them,
And fetch shrill *echoes* from their hollow earth. *Id.*

The sound filling great spaces in arched lines, cannot be guided; therefore there hath not been any means to make artificial *echoes*.
Bacon's Natural History.

(Pamphlets are) the *echoes*, whereby what is done in one part of the kingdom, is heard all over
T. Ford.—1647.

O woods, O fountains, hillocks, dales, and bowers,
With other *echo* late I taught your shades
To answer, and resound far other song. *Milton.*

Custom being but a mere face, as *echo* is a mere voice, rests not in her unaccomplishment, until by secret inclination she accorporate herself with error. *Id.*

The pleasant myrtle may teach the unfortunate *Echo*
In these woods to resound the renowned name of a goddess. *Sidney.*

With peals of shouts the Tyrians praise the song;
Those peals are *echoed* by the Trojan throng.
Dryden's Æneid.

Hark, how the sound disturbs imperious Rome!
Shakes her proud hills, and rolls from dome to dome!
Her mitred princes hear the *echoing* noise,
And, Albion, dread thy wrath and awful voice.
Blackmore.

Our separatists do but *echo* the same note.
Decay of Piety.

One great death deforms the dreary ground;
The *echoed* woes from distant rocks resound.
Prior.

Now the shrill corn-pipe, *echoing* loud to arms,
To rank and file reduce the straggling swarms.
Tickell.

Through rocks and caves the name of Delia sounds;
Delia each cave and *echoing* rock rebounds. *Pope.*

'Tis not enough no harshness gives offence;
The sound must seem an *echo* to the sense. *Id.*

You may as well attempt to silence an *echo* by the strength of voice, as a wit by the force of reason. They both are the louder for it: they both will have the last word. *Young.*

The great and popular are very freely applauded; but all soon grow weary of *echoing* to each other a name which has no other claim to notice, but that many mouths are pronouncing it at once. *Johnson.*

Famine, and Pestilence, her first born son,
Attend to finish what the sword begun;
And *echoing* praises, such as fiends might earn,
And folly pays, resound at your return. *Cowper.*

Ye shelving rocks, dark waves, and sounding shore,—
Ye *echoed* sweet the tender words he swore!—
Can stars or seas the sails of love retain?
O guide my wanderer to my arms again! *Darwin.*

Lo, from the *echoing* axe, and thundering flame,
Poison and plague and yelling rage are fled!
The waters, bursting from their slimy bed,
Bring health and melody to every vale. *Beattie.*

No solemn, antique gentleman of rhyme,
Who having angled all his life for fame,
And getting but a nibble at a time,
Still fussily keeps fishing on, the same
Small 'Triton of the minnows,' the sublime
Of mediocrity, the furious tame,
The *echo's echo*, usher of the school
Of female wits, boy bards— in short, a fool!
Byron.

Echo, or Eccho, is formed from the Greek ηχος, sound. The ancients being wholly unacquainted with the true cause of the echo, ascribed

it to several causes sufficiently whimsical. The poets pretended it was a person of that name metamorphosed, and that she affected to take up her abode in particular places, for they found that she was not to be met with every where. But the moderns, who know sound to consist in a certain tremor or vibration in the sonorous body communicated to the contiguous air, and by that means to the ear, give a more consistent account of echo. See Acoustics. A tremulous body, striking on another solid body, may be repelled without destroying or diminishing its tremor; and, consequently, a sound may be redoubled by the resilition of the tremulous body to the air. But a simple reflection on the sonorous air is not enough to solve the echo; for then every plain surface of a solid hard body, being fit to reflect a voice or sound, would redouble it; which we find does not hold. To produce an echo, therefore, it should seem, that a kind of concameration or vaulting were necessary, to collect, and, by collecting, to heighten and increase, and afterwards reflect the sound; as we find is the case in reflecting the rays of light, where a concave mirror is required. In fact, as often as a sound strikes perpendicularly on a wall, behind which is any thing of a vault or arch, or even another parallel wall, so often will it be reverberated in the same line, or other adjacent ones. For an echo to be heard, therefore, it is necessary that the ear be in the line of reflection; for the person who made the sound to hear its echo, it is necessary he be perpendicular to the place which reflects it: and, for a manifold or tautological echo, it is necessary there be a number of walls, and vaults or cavities, either placed behind or fronting each other. A single arch or concavity, &c., can scarcely ever stop and reflect all the sound; but, if there be a convenient disposition behind it, part of the sound propagated thither, being collected and reflected as before, will present another echo: or, if there be another concavity, opposed at a due distance to the former, the sound reflected from the one upon the other will be tossed back again by this last, &c. Any sound, falling directly or obliquely on any dense body of a smooth superficies, whether plain or arched, is reflected, or echoes, more or less. The surface must be smooth, otherwise the air, by reverberation, will be put out of its regular motion, and the sound thereby broken and extinguished. Echoes may be produced with different circumstances. For, 1. A plane obstacle reflects the sound back in its due tone and loudness, allowance being made for the proportionable decrease of the sound, according to its distance. 2. A convex obstacle reflects the sound somewhat smaller and somewhat quicker though weaker, than otherwise it would be. 3. A concave obstacle echoes back the sound, bigger, slower, and also inverted; but always according to the order of words. 4. The echoing body being removed farther off, it reflects more of the sound than when nearer; which is the reason why some echoes repeat but one syllable, some one word, and some many. 5. Echoing bodies may be so contrived and placed, as that reflecting the sound from one to the other, either directly and mutually, or obliquely and by succession, out of one sound, a multiple echo or many echoes shall arise. A multiple echo may be made by so placing the echoing bodies at unequal distances, that they may reflect all one way, and not one on the other, by which means a manifold successive sound will be heard; one clap of the hands like many; one *ha* like a laughter; one single word like many of the same tone and accent; and so one viol, like many of the same kind, imitating each other. Lastly, echoing bodies may be so ordered, that, from any one sound given, they shall produce many echoes different both as to tone and intention: by which means a musical room may be so contrived, that not only one instrument playing therein shall seem many of the same sort and size, but even a concert of different ones, only by placing certain echoing bodies so that any note played shall be returned by them in thirds, fifths, and eighths.

Echo is also used for the place where the repetition of the sound is produced or heard. In echoes, the place where the speaker stands is called the centrum phonicum; and the object or place that returns the voice, the centrum phonocampticum. Echoes are distinguished into two kinds; viz. single and tautological, or multiple.

Echo, in architecture, a term applied to certain kinds of vaults and arches, most commonly of the elliptic and parabolic figures used to redouble sounds, and produce artificial echoes.

Echo, in poetry, a kind of composition wherein the last words or syllables of each verse contain some meaning, which, being repeated apart, answers to some question or other matter contained in the verse; as in this beautiful one from Virgil:—

Crudelis mater magis, an puer, improbus ille?
Improbus ille puer, crudelis tu quoque mater.

The elegance of an echo consists in giving a new sense to the last words; which reverberate, as it were, the motions of the mind, and by that means affect it with surprise and admiration.

Echo, in mythology, a daughter of Aer and Tellus, who chiefly resided in the vicinity of the Cephisus. She was once one of Juno's attendants, and became the confidant of Jupiter's amours. Her loquacity, however, displeased Jupiter, and she was deprived of the power of speech by Juno, and only permitted to answer the questions which were put to her. Pan had formerly been one of her admirers, but he never enjoyed her favors. Echo, after she had been punished by Juno, fell in love with Narcissus; but being despised by him pined to death, having nothing left but her voice.

ECHOMETER, among musicians, a kind of scale or rule, with several lines thereon, serving to measure the duration and length of sounds, and to find their intervals and ratios.

ECIJA, or Exija, a considerable town of Spain, in the province of Seville, beautifully situated on the Xenil, and surrounded with small hills, which make it the warmest place of Andalusia. Wool and hemp are its chief riches; but tanning and the manufacture of leather, employ a portion of its inhabitants, who, altogether, amount to 28,000. This town is the Colonia Augusta Firmia of the ancients, and many Roman antiquities have been discovered here. It

is said to have been formerly of great importance; at present it contains six churches, sixteen convents, and fifteen hospitals; it has also a large square with a piazza. The Xenil is crossed by a neat modern bridge; and there is along the left bank a delightful public walk, composed of alleys, ornamented with statues. Fifty-five miles E. N. E. of Seville.

ECKHEL (Joseph Hilary), a learned Jesuit, was born at Entzesfield in Austria in 1737. Becoming a member of the society of St. Ignatius, he was appointed keeper of the imperial cabinet of medals, and professor of archæology at Vienna. He may be regarded as the modern founder of the science of Numismatics, the principles of which are fully developed in his treatise Doctrina Veterum Nummorum. 8 vols. fol. He died in 1798

ECKIUS (John), a learned divine, professor in the university of Ingoldstadt, memorable for his opposition of Luther, Melancthon, Carolostadius, and other leading Protestants in Germany. He wrote many polemical tracts; and among the rest, a Manual of Controversies, printed in 1535, in which he discourses upon most of the heads contested between the Protestants and Papists. He was a man of great learning and zeal, and died in 1543.

ECKDALA, or AKDALA, an ancient, but now ruined fortress of the district of Dacca, Bengal, situated on the banks of the Luckya River, which, during the rainy season, surrounds it with water. In 1353 Ilyas Haji, the second independent king of Bengal, of the Mahommedan dynasty, took refuge in this place from the army of the emperor of Hindostan, and defended it, till the setting in of the rains compelled the enemy to raise the siege, and the sultan Seyd Hussein made it his constant residence from the year 1499 to 1520, although Pundua was his political capital.

ECLAIRCI'SSEMENT, *n. s.* Fr. Explanation; the act of clearing up an affair by verbal expostulation.

The *eclaircissement* ended in the discovery of the informer. *Clarendon.*

ECLAT, *n. s.* Fr. Splendor; show; lustre. Not English, says Dr. Johnson.

Nothing more contributes to the variety, surprise, and *eclat* of Homer's battles, than that artificial manner of gaging his heroes by each other.

Pope's Essay on Homer.

ECLE'CTIC, *adj.* εκλεκτικος. Selecting; choosing at will. See below.

Cicero was of the *eclectic* sect, and chose out of each such positions as came nearest truth.

Watts on the Mind.

ECLECTICS, ancient philosophers, who, without attaching themselves to any particular sect, chose what they judged good and solid from each. Laertius says, that they were also denominated Analogetici; but that they call themselves Philalethes, i. e. lovers of truth. The founder of the Electici was one Potamon of Alexandria, who lived under Augustus and Tiberius; and who, weary of doubting of all things with the Sceptics and Pyrrhonians, formed the Eclectic sect; which Vossius calls the Eclective.

ECLECTICS were also a certain set of physicians among the ancients, of whom Archigenes, under Trajan, was the chief, who selected from the opinions of all the other sects, that which appeared to them best and most rational; hence they were called eclectics, and their prescriptions medicina eclectica.

ECLECTICS, or modern Platonics, a sect of Christians, who arose about the end of the second century. They professed to make truth the only object of their enquiry, and to be ready to adopt from all the different systems and sects, such tenets as they thought agreeable to it. However, they preferred Plato to the other philosophers, and looked upon his opinions concerning God, the human soul, and things invisible, as conformable to the spirit and genius of the Christian doctrine. One of the principal patrons of this system was Ammonius Saccas, who at this time laid the foundation of that sect, afterwards distinguished by the name of the New Platonists, in the Alexandrian school. See AMMONIUS and PLATONISM.

ECLIPSE', *n. s., v. a.* & *v. n.* Fr. *eclipse*, Ital. *eclissi, ecclessi;* Span. and Portug. *eclipsi:* Brit. *eklips;* Lat. *eclipsis;* Gr. εχλειψις, from εκλειπω, to fail or depart. An obscuration of the heavenly bodies; hence, darkness, obscuration generally: to darken a luminary; to extinguish; cloud; obscure; disgrace: to suffer an eclipse.

Sips of yew,
Slivered in the moon's *eclipse*
Shakspeare. Macbeth.

Then here I take my leave of thee, fair son,
Born to *eclipse* thy life this afternoon.
Id. Henry VI.

All the posterity of our first parents suffered a perpetual *eclipse* of spiritual life.
Raleigh's History.

Let the *eclipsed* moon her throne resign. *Sandys.*

Experience we have of the vanity of human glory, in our scatterings and *eclipses.* *King Charles.*

She told the king, that her husband was *eclipsed* in Ireland by the no-countenance his majesty had shewed towards him. *Clarendon.*

Planets, planet-struck, real *eclipse*
Then suffered. *Milton's Paradise Lost.*
The labouring moon
Eclipses at their charms. *Id.*

So though the sun victorious be,
And from a dark *eclipse* set free,
The influence, which we fondly fear,
Afflicts our thoughts the following year.
Waller.

They had seen tokens of more than common greatness, howsoever now *eclipsed* with fortune. *Sidney.*

Praise him to his father:—
—Let the prince's glory
Seem to *eclipse*, and cast a cloud on his.
Denham's Sophy.

Let other muses write his prosperous fate,
Of conquered nations tell, and kings restored;
But mine shall sing of his *eclipsed* estate,
Which, like the sun's, more wonders does afford.
Dryden.

An *eclipse* of the moon is when the atmosphere of the earth, between the sun and the moon, hinders the light of the sun from falling upon and being reflected by the moon: if the light of the sun is kept off from the whole body of the moon, it is a total *eclipse;* if from a part only, it is a partial one. *Locke.*

Ie descended from his Father, and *eclipsed* the glory of his divine majesty with a veil of flesh.
Calamy's Sermons.

Now if the earth were flat, the darkened moon
Would seem to all *eclipsed* as well as one. *Creech.*

The places that have either shining sentiments or manners, have no occasion for them: a dazzling expression rather damages them, and serves only to *eclipse* their beauty. *Pope.*

ECLIPSE. See ASTRONOMY, Index.

ECLI'PTIC, *n. s.* & *adj.* Εκλειπτικος. A great circle of the sphere supposed to be drawn through the middle of the zodiac, and making an angle with the equinoctial, in the points of Aries and Libra, of 23° 30′ which is the sun's greatest declination: relating to or described by the ecliptic.

All stars that have their distance from the *ecliptick* northwards not more than twenty-three degrees and a half, may, in progression of time, have declination southward, and move beyond the equator.
Browne's Vulgar Errours.

The terraqueous globe had the same site and position, in respect of the sun, that it now hath: its axis was not parallel to that of the *ecliptick*, but inclined in like manner as it is at present.
Woodward's Natural History.

You must conceive an imaginary plane, which, passing through the centre of the sun and the earth, extends itself on all sides as far as the firmament: this plane is called the *ecliptick*, and in this the centre of the earth is perpetually carried, without any deviation.
Bentley.

The earth's rotation makes the night and day;
The sun revolving through the *ecliptick* way,
Effects the various seasons of the year. *Blackmore.*

Where with vast convolution Draco holds
The *ecliptick* axis in his scaly folds,
O'er half the skies his neck enormous rears,
And with immense meanders parts the bears.
Darwin.

ECLIPTIC. See ASTRONOMY, Index.

ECLIPTIC, in geography, a great circle on the terrestrial globe, not only answering to, but falling within, the plane of the celestial ecliptic. See GEOGRAPHY.

E'CLOGUE, *n. s.* Εκλογη. A pastoral poem, so called because Virgil called his pastorals eclogues.

What exclaiming praises Basilius gave this *eclogue* any man may guess, that knows love is better than spectacles to make every thing seem great. *Sidney.*

It is not sufficient that the sentences be brief the whole *eclogue* should be so too. *Pope.*

ECLUSE, FORT DE L', a fort of Switzerland, in the district of Gex, and canton of Geneva, situated on the right bank of the Rhone, about 120 feet above the level of the river. It adheres in appearance to the bare rock of the Jura, which shelves over a part of its fortifications, while the remainder hangs, as it were, suspended above the Rhone. Thirteen miles west of Geneva.

ECONOM'IC, *adj.* & *n. s.* } Gr. οικονομια.
ECONOM'ICAL, *adj.* } Sometimes written, from its derivation, œconomy; but æ is not a diphthong in English, says Dr. Johnson.
ECO'NOMIST, *n. s.* }
ECO'NOMY, *n. s.* }

The management, or government, of a family. Hence frugality, order, regulation, or disposition, of affairs; system of management generally. Economic is used in the same particular and general way: an economist is a good or frugal manager.

In the Greek poets, as in Plautus, we see the *economy* and disposition of poems better observed than in Terence. *Ben Jonson.*

Her quickening power in every living part,
Doth as a nurse, or as a mother serve;
And doth employ her *economick* art,
And busy care, her household to preserve.
Davies.

Some are so plainly *economical*, as even to desire that the seat be well watered, and well swelled.
Wotton's Architecture.

All the divine and infinitely wise ways of *economy* that God could use towards a rational creature, oblige mankind to that course of living which is most agreeable to our nature. *Hammond.*

By St. Paul's *economy* the heir differs nothing from a servant, while he is in his minority; so a servant should differ nothing from a child in the substantial part. *Taylor.*

If this *economy* must be observed in the minutest parts of an epick poem, what soul, though sent into the world with great advantages of nature, cultivated with the liberal arts and sciences, can be sufficient to inform the body of so great a work?
Dryden's Dedication to the Æneid.

I have no other notion of *economy* than that it is the parent of liberty and ease. *Swift.*

In *economical* affairs, having proposed the government of a family, we consider the proper means to effect it. *Watts.*

The regard one shows *economy*, is like that we show an old aunt, who is to leave us something at last.
Shenstone.

Economy is the parent of integrity, of liberty, and of ease; and the beauteous sister of temperance, of cheerfulness, and health. *Adventurer.*

And from the many heavy taxes required from them by the necessities of the state, have surely reason to be *economical*. *Franklin.*

Mere parsimony is not *economy*. It is separable in theory from it; and in fact it may, or it may not, be a part of *economy*, according to circumstances. Expense, and great expense, may be an essential part in true *economy*. If parsimony were to be considered as one of the kinds of that virtue, there is however another and an higher *economy*. *Economy* is a distributive virtue, and consists not in saving, but in selecting.
Burke.

The age of chivalry is gone, and one of calculators and *economists* has succeeded. *Id.*

From this outline a philosopher may catch a glimpse of the general *economy* of nature; and like the mariner cast upon an unknown shore, who rejoiced when he saw the print of a human foot upon the sand, he may cry out with rapture, 'A God dwells here.'
Darwin.

ECOUEN, a well-built town of France, on the side of a hill, containing a number of villas belonging to the citizens of Paris, from which it is about twelve miles distant. On an eminence towards the west extremity stands a noble castle, built in the reign of Francis I., and now belonging to the prince of Conde. Inhabitants about 1200.

ECPHRA'CTICKS, *n. s.* Gr. εκ and φραττω. Such medicines as render rough humors more thin, so as to promote their discharge.

Procure the blood a free course, ventilation, and transpiration, by suitable purges and *ecphractick* medicines. *Harvey.*

EC'STASY, *n. s.* } Fr. *extase*; Ital. Span. and Port. *ectasi*; Lat. *ec-stasis*; Greek, εκστασις, ab εκτεινω, *extendo*. Any passion by which the thoughts are absorbed, and in which the mind is for a time lost. The adjectives all mean rapt or absorbed in passion or enthusiasm.

Follow them swiftly,
And hinder them from what this *ecstacy*
May now provoke them to.
Shakspeare. Tempest.

Now see that noble and most sovereign reason,
Like sweet bells jangled out of tune, and harsh,
That unmatched form, and feature of blown youth,
Blasted with *ecstasy*. *Id. Hamlet.*

Return, my soul! from this *ecstacie*
And meditation of what thou shalt be
To earthly thoughts, till it to thee appear
With whom thy conversation must be there.
Donne.

Would she but shade her tender brows with bay,
That now lye bare in carelesse willful rage;
And trance herselfe in that sweet *extacy*,
That rouzeth drouping thoughts of bashful age.
Bp. Hall.

He loved me well, and oft would beg me sing;
Which when I did, he on the tender grass
Would sit, and hearken even to *ecstasy*. *Milton.*

There doth my soul in holy vision sit,
In pensive trance, and anguish, and *ecstatick* fit.
Id.

When one of them, after an *extatical* manner, fell down before an angel, he was severely rebuked, and bidden to worship God. *Stillingfleet.*

These are as common to the inanimate things as to the most *exstasied* soul upon earth. *Norris.*

'T may be
No longer joy there, but an *ecstasy*. *Suckling.*

Whether what we call *ecstacy* be not dreaming with our eyes open, I leave to be examined. *Locke.*

The religious pleasure of a well-disposed mind moves gently, and therefore constantly: it does not affect by rapture and *ecstasy*; but is like the pleasure of health, still and sober. *South.*

Each delighted, and delighting, gives
The pleasing *ecstasy* which each receives.
Prior.

A pleasure, which no language can express;
An *ecstacy* that mothers only feel,
Plays round my heart. *Philips's Distressed Mother.*

In trance *ecstatick* may thy pangs be drowned;
Bright clouds descend, and angels watch thee round.
Pope.

The very kine that gambol at high noon,
The total herd receiving first from one,
That leads the dance, a summons to be gay,
Though, wild their strange vagaries, and uncouth
Their efforts, yet resolved with one consent,
To give such act and utterance as they may
To *ecstasy* too big to be suppressed. *Cowper.*

Wakes from his trance, alarmed with young Desire,
Finds his new sex, and feels *ecstatic* fire;
From flower to flower with honeyed lip he springs,
And seeks his velvet loves on silver wings.
Darwin.

And let not this seem strange; the devotee
Lives not in earth, but in his *ecstasy*;
Around him days and worlds are heedless driven;
His soul is gone before his dust to heaven. *Byron.*

ECSTATICI, Εκστατικοι, from εξιστημι, I am entranced; in antiquity, a kind of diviners who were cast into trances or ecstacies, in which they lay like men dead or asleep, deprived of all sense and motion; but, after some time, returning to themselves, gave strange relations of what they had seen and heard.

ECTHESIS, in church history, a confession of faith, in the form of an edict, published A D. 639, by the emperor Heraclius, to pacify the troubles occasioned by the Eutychian heresy in the eastern church. He however revoked it, on being informed that pope Severinus had condemned it, as favoring the Monothelites; declaring at the same time, that Sergius, patriarch of Constantinople, was the author of it.

ECTHLIPSIS, among Latin grammarians, a figure of prosody whereby the *m*, at the end of a word, where the following word begins with a vowel, is elided, or cut off, together with the vowel preceding it, for the sake of the measure of the verse: thus they read mult' ille, for multum ille.

ECTROPIUM, in surgery, is when the eyelids are inverted, or retracted, so that they show their internal or red surface, and cannot sufficiently cover the eye.

E'CTYPE, *n. s.* Gr. εκτυπος. A copy.

The complex ideas of substances are *ectypes*, copies, but not perfect ones; not adequate. *Locke.*

EDA, or EDAY, one of the Orkney Isles, about five miles and a half long, and nearly one and a half broad, situated eight miles N. N. E. from Pomora. It consists chiefly of hills of a moderate height, affording excellent pasture; and contains several villages, and has two good harbours or road-steads, each sheltered by a small islet, where vessels of any burden may ride in safety. There is an old chapel in ruins, and the remains of several religious houses. Near this island are several pasture isles or holms, on which are the ruins of several religious edifices.

EDA'CITY, *n. s.* } Lat. *edacitas*. Voracity; EDA'CIOUS, *adj.* } ravenousness; greediness; rapacity.

The wolf is a beast of great *edacity*, and digestion; it may be the parts of him comfort the bowels. *Bacon.*

EDAM, a town of North Holland, near the Zuyder-zee, with a good harbour, formed by the river Ey. The inhabitants derive their subsistence partly from ship-building, and partly from salt and oil works. It is an old market for cheese, although much fallen off. Twelve miles north of Amsterdam.

EDAM, an island on the coast of Java, about two miles in circuit and very woody. Here the Dutch have several salt warehouses, and a convict establishment for making cordage.

EDDA, the system of the ancient Icelandic or Runic mythology, containing many curious particulars of the theology, philosophy, and manners of the northern nations of Europe; or of the Scandinavians who had migrated from Asia, and from whom our Saxon ancestors were descended. Mr. Mallet apprehends that it was originally compiled, soon after the Pagan religion was abolished, as a course of poetical lectures, for the use of such young Icelanders as devoted themselves to the profession of a scald or poet. It consists of two principal parts: the first containing a brief system

of mythology, properly called the Edda: and the second being a kind of art of poetry, and called scalda. The most ancient Edda was compiled by Soemund Sigfusson, surnamed the learned, who was born in Iceland about A. D. 1057. This was abridged, and rendered more intelligible, about 120 years afterwards, in the form of a dialogue, by Snorro Sturleson, who was supreme judge of Iceland in 1215 and 1222. He added also the second part in the form of a dialogue, being a detail of different events transacted among the divinities. The only three pieces that are known to remain of the more ancient Edda of Soemund, are the Voluspa, the Havamaal, and the Runic chapter. The Voluspa, or prophecy of Vola or Fola, appears to be the text, on which the Edda is the comment. It contains, in 200 or 300 lines, the whole system of mythology, disclosed in the Edda, and may be compared to the Sibylline verses, on account of its laconic yet bold style, and its imagery and obscurity. It is professedly a revelation of the decrees of the Father of Nature, and the actions and operations of the gods. It describes the chaos, the formation of the world, with its various inhabitants, the functions of the gods, their most signal adventures, their quarrels with Loke, or Lak, their great adversary, and the vengeance that ensued; and concludes with a long description of the final state of the universe, its dissolution and conflagration, the battle of the inferior deities, and the evil beings, the renovation of the world, the happy lot of the good, and the punishment of the wicked. The Havamaal, or Sublime Discourse, is attributed to the god Odin, who is supposed to have given these precepts of wisdom to mankind. It is comprised in about 120 stanzas, and resembles the book of Proverbs. The Runic chapter contains a short system of ancient magic, and especially of the enchantments wrought by the operation of Runic characters. A manuscript copy of the Edda of Snorro is preserved in the library of the university of Upsal; the first part of which has been published with a Swedish and Latin version by M. Goranson. The Latin version is printed as a supplement to M. Mallet's Northern Antiquities. The first edition of the Edda was published by Resenius, professor at Copenhagen, in a large 4to. volume, in 1665, containing the text of the Edda, a Latin translation, by an Icelandic priest, a Danish version, and various readings from different MSS. M. Mallet has also given an English translation of the first part, accompanied with remarks, from which we learn that the Edda teaches the doctrine of the Supreme, called the Universal Father, and Odin, who lives for ever, governs all his kingdom, and directs the great things, as well as the small, who formed the heaven, earth, and air; made man, and gave him a spirit or soul, which shall live after the body shall have mouldered away; and then all the just shall dwell with him in Gimle or Vingolf, the palace of friendship; but wicked men shall go to Hela, or death, and from thence to Nislheim, or the abode of the wicked, which is below in the ninth world. It inculcates also the belief of several inferior gods and goddesses, the chief of whom is Frigga, or Frea, i. e. lady, meaning hereby the earth, who was the spouse of Odin or the Supreme God; whence we may infer that, according to the opinion of these ancient philosophers, this Odin was the active principle or soul of the world, which, uniting itself with matter, had thereby put it into a condition to produce the intelligences or inferior gods, and men and all other creatures. The Edda likewise teaches the existence of an evil being called Loke, the calumniator of the gods, the artificer of fraud, who surpasses all other beings in cunning and perfidy. It teaches the creation of all things out of an abyss or chaos; the final destruction of the world by fire; the absorption of the inferior divinities, both good and bad, into the bosom of the grand divinity, from whom all things proceeded, as emanations of his essence, and who will survive all things; and the renovation of the earth in an improved state.

EDDER, *v. a.* & *n. s.* Probably from edge. To bind or interweave a fence. Not in common use.

To add strength to the edge, *edder* it; which is, bind the top of the stakes with some small long poles, on each side. *Mortimer's Husbandry.*

In lopping and felling, save *edder* and stake,
Thine hedges, as needeth, to mend or to make.
Tusser.

E'DDY, *n. s.*, *adj.* & *v. a.* Icel. *ida*; but it is better derived from Goth. *idga*, to agitate: Sax. ed, backward, again, and ea, water. Water that runs contrary to the main stream: whirl. It is used also as a verb active.

My praises are as a bulrush upon a stream; if they sink not, 'tis because they are borne up by the strength of the current, which supports their lightness; but they are carried round again, and return on the *eddy* where they first began. *Dryden.*

And chaff with *eddy* winds is whirled around,
And dancing leaves are lifted from the ground.
Id. Virgil.

The wild waves mastered him, and sucked him in,
And smiling *eddies* dimpled on the main. *Dryden.*

So, where our wide Numidian wastes extend,
Sudden the impetuous hurricanes descend,
Wheel through the air, in circling *eddies* play,
Tear up the sands, and sweep whole plains away.
Addison's Cato.

Tis thine to cherish and to feed
The pungent nose-refreshing weed:
Which, whether pulverized it gain
A speedy passage to the brain,
Or whether, touched with fire, it rise
In circling *eddies* to the skies,
Does thought more quicken and refine
Than all the breath of all the Nine. *Cowper.*

Through her fine limbs the mimic lightnings dart,
And flames innocuous *eddy* round her heart;
O'er her fair brow the kindling lustres glare,
Blue rays diverging from her bristling hair. *Darwin.*

The sea-tide's opposing motion,
In azure column proudly gleaming,
Beats back the current many a rood
In curling foam and mingling flood,
While *eddying* whirl, and breaking wave,
Roused by the blast of winter, rave. *Byron.*

EDDYSTONE Rocks, the name of some rocks in the English Channel, so called from the great variety of contrary currents in their vicinity. They are situated nearly S.S.W. from the middle of Plymouth Sound, their distance from the port

about fourteen miles; and from Ram-Head, the nearest point of land, twelve and a half. They are almost in the line which joins the Start and the Lizard Points; and, as they lie in the direction of vessels coasting up and down the Channel, they were very dangerous, and frequently ships were wrecked on them, before the lighthouse was established. They are so exposed to the swells of the ocean, from all the south and west points of the compass, that the heavy seas come uncontrolled, and break on them with the utmost fury. After a storm, when the sea in general is, to all appearance, quite smooth, and its surface unruffled by the slightest breeze, the growing swell or under current, meeting the slope of the rocks, the sea often rises above the lighthouse in a magnificent manner, overtopping it as with a canopy of froth. Notwithstanding this tremendous swell, Mr. Henry Winstanley, in 1696, undertook to build a lighthouse on the principal rock, for the rest are under water; and he completed it in 1700. This ingenious mechanic was so confident of the stability of his structure, that he declared his wish to be in it during the most tremendous storm that could blow. Unfortunately he obtained his wish, for he perished in it during the dreadful storm which destroyed it, on the 27th November, 1703. In 1709 another lighthouse was erected of wood on this rock, but on a different construction, by Mr. John Rudyard. It stood till 1755, when it was burnt. A third one, of stone, begun by the late celebrated Mr. John Smeaton, on the 2d of April, 1757, was finished 24th August, 1759; and has withstood the rage of all weathers ever since. The rock which slopes towards the south-west is cut into horizontal steps; into which are dove-tailed, and united by a strong cement, Portland stone and granite, for Mr. Smeaton discovered that it was impossible to make use of the former entirely, as there is a marine animal that can destroy it; and that he could not use the latter solely, as the labor of working it would have been too expensive. He therefore used the one for the internal, and the other for the external, part of the structure. Upon the principle of a broad base and accumulation of matter, the whole, to the height of thirty-five feet from the foundation, is a solid mass of stones engrafted into each other, and united by every kind of additional strength. The lighthouse has four rooms, one over another, and at the top a gallery and lantern. The stone floors are flat above, but concave below, and are kept from pressing against the sides of the building by a chain let into the walls. The lighthouse is nearly eighty feet high, and withstands the most violent storms, without sustaining the smallest injury. In all probability, as Mr. Smeaton said, nothing but an earthquake can destroy it. The wooden part of it, however, was burnt in 1770, but renewed in 1774.

EDELINCK (Gerard), a famous engraver, born at Antwerp, where he was instructed in drawing and engraving. He settled at Paris in the reign of Louis XIV. who made him his engraver in ordinary. He was also counsellor in the Royal Academy of Painting. His works are particularly esteemed for the neatness of the engraving, their brilliant cast, and the ease apparent in the execution; and to this facility is owing the great number of plates we have of his, among which are excellent portraits of many illustrious men of his time. Among the most admired of his prints are the following: 1. A battle between four horsemen, with three figures lying slain upon the ground, from Leonardo da Vinci. 2. A holy family, with Elizabeth, Saint John, and two angels, from the famous picture of Raphael in the late king of France's collection. 3. Mary Magdalen, from Le Brun. 4. Alexander entering into the tent of Darius, a large print, on two plates, from Le Brun. 5. Alexander entering into the tent of Darius, finished by P. Drevet, from Peter Mignard. Edelinck died in 1707, in an advanced age, at the Hotel Royal, in the Gobelins, where he had an apartment. His brother John was also a skilful engraver, but died young.

EDEMATO'SE, *adj.* Οιδημα. Swelling; full of humors: commonly written oedematous.

A serosity obstructing the glands may be watery, *edematose*, and schirrous, according to the viscosity of the humour. *Arbuthnot.*

EDEN; from Heb. עדן, i. e. pleasure; a country with a garden, in which the progenitors of mankind were settled by God himself. It would be endless to recount the various conjectures as to its situation, some of which are very wild and extravagant. Moses says that 'a river went out of Eden to water the garden, and from thence it was parted and became into four heads.' This river is supposed to be the common channel of the Euphrates and Tigris, after their confluence; which parted again below the garden into two different channels, so that the two channels before, and the other two after their confluence, constitute the heads mentioned by Moses. This will determine the situation of the garden to have been in the south of Mesopotamia, or in Babylonia. The garden was also called Paradise; a term of Persic original, denoting a garden.

EDEN, a river of England, which rises in Westmoreland, on the borders of Yorkshire, crosses the county of Cumberland, and runs into the Solway Frith, about seven miles below Carlisle. Salmon appear in the Eden in numbers, so early as December and January, and the London and Newcastle markets are supplied with early fish from this river; but it is remarkable that they do not visit the Esk in any quantity till April, notwithstanding the mouths of the two rivers are very near each other.

EDEN, a river of Scotland, in Berwickshire, which rises in Lammermuir, joins the Tiviot at Kelso, runs along the south and south-east borders of the parish of Edenham, and falls into the Tweed near Coldstream. It produces trouts and some salmon.

EDENTON, a district on the sea-coast of North Carolina, bounded on the north by the state of Virginia, on the east by the ocean, on the west by Halifax district, and on the south by Newbern. It is subdivided into nine counties, viz. Chowan, Currituck, Camden, Pasquotank, Perquimins, Gates, Hertford, Bertie, and Tyrrel. Its chief town is Edenton. The wood is chiefly

pine, oak, cypress, and juniper, all of which abound.

EDENTON, the capital of the above district, is a post town and port of entry, at the head of a bay on the north side of Albemarle Sound, and at the north-east side of the opening of Chowan River. It is ninety-seven miles north of Newbern, 139 south-east of Petersburgh, and 440 S.S.W. of Philadelphia.

EDER, a river of Germany, having its source on the borders of Nassau, and, after watering the county of Hesse, having its embouchure in the Fulda.

EDESSA, or VODINA, a large town of European Turkey, in Romania, near the Vistricza, called by the Turks Moglena. In ancient times it was the residence of the Macedonian kings. It has about 12,000 inhabitants, part of whom are employed in woollen manufactures; and is forty-four miles W.N.W. of Saloniki, and 316 west of Constantinople.

EDFU, a village of Upper Egypt, celebrated as the site of the ancient Apollinopolis Parva, and containing two temples, which present most magnificent monuments of ancient Egyptian architecture. Those of Tentyra, in Denon's opinion, alone could equal them. Each of the sides of the pyramidal propylon, which forms the principal entrance to the greater temple, is 100 feet in length, thirty wide, and 100 high. Many of the figures sculptured on it are thirty feet high, and executed in a very masterly and spirited style. The colors are preserved occasionally. There is a staircase in each division of 150, or 160 steps, which lead into apartments alternately thirty-one feet by ten, and seventeen by ten. Mr. Hamilton never saw more colossal sculptures than on the outer walls of this temple. They are chiefly emblematic of the beneficial influence of the sun in drawing forth and maturing the fruits of the earth. Isis is represented suckling a young child; priests and priestesses are sometimes seen offering young children to the goddess and to Osiris. The rubbish has collected to a greater height here than on the site of any of the other towns in the Thebaid. Long. 32° 53′ 44″ E., lat. 24° 48′ 53″ N.

EDGAR, the son of Edmund I., one of the most fortunate of the Anglo-Saxon monarchs. He succeeded his brother Edwy, A. D. 959; and is said to have been rowed down the Dee, by eight kings, his vassals. He died in 975. See ENGLAND.

EDGAR ATHELING, the son of prince Edward, by Agatha, daughter of the emperor Henry II. and grandson of Edmund II. king of England. Though he was the lawful heir of the crown, and was even declared king upon the death of Harold II. he submitted to William the Conqueror, after the battle of Hastings: but afterwards retired to Scotland with his two sisters, Margaret and Christina: where they were kindly received by king Malcolm II. who married the princess Margaret. See ENGLAND.

EDGAR, a sea-port town of Massachusetts, in the United States, situated on the east side of the island of Martha's Vineyard, and reckoned the best sea-port of the island. Long. 70° 25′ W., lat. 41° 22′ N.

EDGCOMB, a county of Halifax district North Carolina, bounded on the south by Pitt county; on the south-west by Wayne county and Tar River, which affords it communication with several counties in the state, on the west by Nash county, and on the east by Martin and Halifax counties.

EDGE, *n. s.*, *v. a.* & *v. n.*
EDG'ING, *n. s.*
EDGE'LESS, *adj.*
EDGE'TOOL, *n. s.*
EDGE'WISE, *adv.*

Sax. ecge; Goth. *egg*, or *æg*; Teut. *eche*; Swed. *egg*; Lat. *acies*, of Gr. ακις.

The sharp part of a blade or cutting instrument; termination of two sloping sides; brink; margin; applied, also, to acuteness of intellect. The verbs are derived from the noun, and the active verb is used to signify putting forward edgewise: and, metaphorically, to exasperate; inflame. Edging, as a substantive, means that which forms, or covers, the edge: bordering.

'Tis slander,
Whose *edge* is sharper than the sword.
Shakspeare. Cymbeline.

Abate the *edge* of traitors, gracious Lord!
That would reduce these bloody days again.
Id. Richard III.

To morrow in the battle think on me,
And fall thy *edgeless* sword; despair and die. *Id.*

A harsh grating tune setteth the teeth on *edge*.
Bacon.

We find that subtile or *edged* quantities do prevail over blunt ones. *Digby on Bodies.*

He that will a good *edge* win,
Must forge thick, and grind thin. *Proverb.*

There sat she rolling her alluring eyes,
To *edge* her champion's sword, and urge my ruin.
Dryden.

I must *edge* upon a point of wind,
And make slow way. *Id. Cleomenes.*

Silence and solitude set an *edge* upon the genius, and cause a greater application. *Id. Dufresnoy.*

The garland which I wove for you to wear,
And bordered with a rosy *edging* round. *Dryden.*

There must be no playing with things sacred, nor jesting with *edgedtools*. *L'Estrange.*

Nurses from their children keep *edgetools*. *Dorset.*

Edging by degrees their chairs forwards, they were in a little time got up close to one another.
Locke.

Should the flat side be objected to the stream, it would be soon turned *edgewise* by the force of it.
Ray.

A woman branches out into a long dissertation upon the *edging* of a petticoat. *Addison's Spectator.*

They are *edgeless* weapons it hath to encounter.
Decay of Piety.

But when long time the wretches' thoughts refined,
When want had set an *edge* upon their mind,
Then various cares their working thoughts employed
And that which each invented all enjoyed.
Creech's Manil.

The rays which pass very near to the *edges* of any body, are bent a little by the action of the body.
Newton's Opticks.

We have, for many years, walked upon the *edge* of a precipice, while nothing but the slender thread of human life has held us from sinking into endless misery. *Rogers.*

Yes, the last pen for freedom let me draw,
When truth stands trembling on the *edge* of law.
Pope.

Some harrow their ground over, and then plow it upon an *edge*. *Mortimer's Husbandry.*

I shall exercise upon steel, and its several sorts; and what sort is fittest for *edgetools*, which for springs. *Moxon.*

It is with wits as with razors, which are never so apt to cut those they are employed on, as when they have lost their *edge*. *Swift.*

However, if in general it be not easy to determine concerning the lawfulness of such devious proceedings, which must be ever on the *edge* of crimes, it is far from difficult to foresee the perilous consequences of the resuscitation of such a power in the people. *Burke.*

Edge over *edge* expands the hardening scale,
And sheaths his slimy skin in silver mail. *Darwin.*

But see him on the *edge* of life,
With cares and sorrows worn;
Then age and want, Oh! ill-matched pair!
Show man was made to mourn. *Burns.*

LADY TEA. Nay, I allow even that's better than the pains Mrs. Prim takes to conceal her losses in front. She draws her mouth till it positively resembles the aperture of a poor's box, and all her words appear to slide out *edgewise*, as it were. *Sheridan.*

And you, ye crags, upon whose extreme *edge*,
I stand, and on the torrent's brink beneath
Behold the tall pines dwindled as to shrubs
In dizziness of distance; when a leap,
A stir, a motion, even a breath, would bring
My breast upon its rocky bosom's bed
To rest for ever—wherefore do I pause? *Byron.*

EDGEFIELD, a county of South Carolina, the southernmost in the district of Ninety-Six, bounded on the north by Saluda River, which divides it from Newbury county, on the south-west by Savannah River, which separates it from the state of Georgia, on the east by Orangeburg district, and on the west by Abbeville county. The ridge of elevated land, which divides the waters of Saluda from those of Savannah River, passes nearly through the middle of the county. Edgefield county is about thirty-four miles long, and twenty-four broad.

EDGEFIELD, a town in the above county, with a court house and post office: forty miles from Abbeville; twenty-five from Augusta, and sixty from Colombia.

EDGEHILL, a village in Warwickshire, near Kenton; memorable for the first battle fought between the forces of king Charles I., and those of the parliament in 1642. It is fourteen miles south of Warwick. See ENGLAND, HISTORY.

EDGEWARE, a town of England, in the county of Middlesex, on the borders of Hertfordshire. It is eight miles north-west of London.

EDGEWORTH (Abbé), was born at Edgeworth's town in Ireland in 1745; but his father, who was a clergyman, having become a catholic, he settled with his family at Toulouse. After studying at Paris, the abbé Edgeworth entered the fraternity of Les Missions Etrangères. He was confessor to the princess Elizabeth, and thus becoming known to the unfortunate Louis XVI, he attended him to the scaffold. He made his escape in disguise afterwards, and came to England, whence he went to Mittau to attend upon Louis XVIII, and died there of an hospital fever in 1807. His letters and life were published in 1818.

EDGEWORTH (Richard Lovell), a literary gentleman of considerable talents, was born in 1744 at Bath, and of the same family as the foregoing. After an education at Trinity College, Dublin, and Corpus Christi, Oxford, he entered the Temple, but, mechanics and general literature engaging his attention, he formed an acquaintance with Dr. Darwin, Mr. Day, and men of similar pursuits; in 1767 he is said to have contrived a telegraph, which however he did not bring into use. After residing some years in England he went to Lyons, where he was engaged in the direction of some works on the Rhone. In 1780 he became a fellow of the Royal Society. In the latter part of his life he resided chiefly on his own estate at Edgeworth's-town, in the south of Ireland, constructing rail-roads, draining bogs, &c. and in conjunction with his celebrated daughter, Miss Edgeworth, wrote a treatise on practical, and another on professional education, as well as some subsidiary works. He was also the author of An Essay on the Construction of Roads and Carriages; A Letter to Lord Charlemont on the Telegraph; and various papers in the Transactions of the Royal Society and Irish Academy. He died at Edgeworth's-town, in June 1817. Mr. Edgeworth married four wives, of whom two were sisters.

EDGINGS, in gardening, the series of small but durable plants, set round the edges or borders of flower-beds, &c. The best and most durable of all plants for this use, is box; which, if well planted and rightly managed, will continue in strength and beauty for many years. The seasons for planting this are, the autumn, and very early in the spring; and the best species for this purpose is the dwarf Dutch box. Formerly, it was also a very common practice to plant borders, or edgings, of aromatic herbs; as thyme, savory, hyssop, lavender, and the like; but these are all apt to grow woody, and to be in part, or wholly destroyed in hard winters. Daisies, thrift, or sea july-flower, and camomile, are also used by some for this purpose: but they require yearly transplanting, and a great deal of trouble, otherwise they grow out of form; and they are also subject to perish in very hard seasons.

EDHILING, EDHILINGUS, an ancient appellation of the nobility among the Anglo-Saxons. 'The Saxon nation,' says Nithard, Hist. lib. iv., 'is divided into three orders or classes of people; the edhilingi, the friliugi, and the lazzi; which signify the nobility, the freemen, and the vassals or slaves.' Instead of edhiling, we sometimes meet with atheling, or ætheling; which appellation was likewise given to the king's son, and the presumptive heir of the crown. See ATHELING.

ED'DISH, *n. s.* Sax. ebiſc, a second crop of grass; the aftermath: a ground on which a crop has grown the preceding year.

Eddish, or *eadish*, is the latter pasture, or grass, which comes after mowing or reaping; otherwise called ear-grass, earsh, and etch. *Dr. A. Rees.*

E'DIBLE, *adj.* From Lat. *edo*. Fit to be eaten; fit for food.

Some flesh is not *edible*, as horses and dogs. *Bacon.*

Wheat and barley, and the like, are made either *edible* or potable by man's art and industry. *More against Atheism.*

The *edible* creation decks the board. *Prior.*

Some of the fungus kind, gathered for *edible* mushrooms, have produced a difficulty of breathing. *Arbuthnot.*

E'DICT, *n. s.* Lat. *edictum.* A proclamation or command of prohibition; a law promulgated.

When an absolute monarch commandeth his subjects that which seemeth good in his own discretion, hath not his *edict* the force of a law? *Hooker.*

The great King of kings,
Hath in the table of his law commanded
That thou shalt do no murder; will you then
Spurn at his *edict*, and fulfil a man's?
Shakspeare. Richard III.

Severe decrees may keep our tongues in awe,
But to our thoughts what *edict* can give law? *Dryden.*

The ministers are always preaching, and the governours putting out *edicts* against gaming and fine cloaths. *Addison.*

It is the business of a sensible government to impress all ranks with a sense of subordination, whether this be effected by a diamond buckle, or a virtuous *dict*, a sumptuary law, or a glass necklace. *Goldsmith.*

If we may judge by the acts, arrets, and *edicts*, all the world over, for regulating commerce, an assembly of great men is the greatest fool upon earth. *Franklin.*

An EDICT is an order or instrument, signed and sealed by a prince, to serve as a law to his subjects. We find frequent mention of the edicts of the prætor, in the Roman law. In the ci-devant French law, the edicts were of several kinds: some importing new laws or regulations; others, the erection of new offices; establishments of duties, rents, &c.; and sometimes articles of pacification. In despotic governments, an edict is much the same as a proclamation is with us: but with this difference, that the former has the authority of a law from the power which issues it; whereas the latter is only a declaration of a law, to which it refers, and has no power in itself. Edicts cannot exist in Britain, because the enacting of laws is lodged in the parliament and not in the king. Edicts are all sealed with green wax, as a sign of their being perpetual and irrevocable.

ED'IFY, *v. a.*
EDIFICA'TION, *n. s.*
EDIFICA'TORY, *adj.*
ED'IFICE, *n. s.*
ED'IFIER,
ED'IFYING, *n. s.*

Fr. *edifier*; Span. and Portug. *edificar*; Italian and Lat. *edificare*. To build, applied both literally and morally; but edification is principally used in the latter sense: edificatory is tending to edification: edifice the building or structure raised: edifier he who builds or raises it.

Seek that ye may excel to the *edifying* of the church. *Bible. 1 Cor. 14. 12.*

He who speaketh no more than *edifieth*, is undeservedly reprehended for much speaking. *Hooker.*

Men are *edified* when either their understanding is taught somewhat whereof, in such actions, it behoveth all men to consider, or when their hearts are moved with any affection suitable thereunto. *Id.*

There was a holy chapel *edifyed*,
Wherein the hermit wont to say
His holy things each morn and eventide.
Spenser.

My love was like a fair house built on another man's ground; so that I have lost my *edifice* by mistaking the place where I erected it.
Shakspeare. Merry Wives of Windsor.

You shall hardly *edify* me, that those nations might not, by the law of nature, have been subdued by any nation that had only policy and moral virtue.
Bacon's Holy War.

God built
So spacious, and his line stretched out so far,
That man may know he dwells not in his own;
An *edifice* too large for him to fill. *Milton.*

An exercise so beneficially *edificatory* to the church. *Bp. Hall.*

Our blessed Saviour told us, that we must account for every idle word, not meaning that every word not designed for *edification*, or less prudent, shall be reckoned for a sin. *Taylor.*

Life is no life, without the blessing of a friendly and an *edifying* conversation. *L'Estrange.*

He gave, he taught; and *edifyed* the more,
Because he shewed, by proof, 'twas easy to be poor.
Dryden.

Men have *edifyed*
A lofty temple, and perfumed an altar to thy name.
Chapman.

Out of these magazines I shall supply the town with what may tend to their *edification*.
Addison's Guardian.

As Tuscan pillars owe their original to this country, the architects always give them a place in *edifices* raised in Tuscany. *Id. On Italy.*

He must be an idiot that cannot discern more strokes of workmanship in the structure of an animal than in the most elegant *edifice*. *Bentley.*

As in order to the *edification* of the church, the spirit of God at first conferred upon the ministers of it a great variety of spiritual gifts, *Mason.*

It is with infinite caution that any man ought to venture upon pulling down an *edifice* which has answered in any tolerable degree for ages the common purposes of society, or on building it up again, without having models and patterns of approved utility before his eyes. *Burke.*

Some decent in demeanour while they preach,
That task performed, relapse into themselves:
And, having spoken wisely, at the close
Grow wanton, and give proof to every eye,
Whoe'er was *edified*, themselves were not.
Cowper.

So fares he in that dreadful hour,
When injured Truth exerts her power,
Some new phenomenon to raise,
Which, bursting on his frighted gaze,
From its proud summit to the ground,
Proves the whole *edifice* unsound. *Beattie.*

E'DILE, *n. s.* Lat. *ædilis.* The title of a magistrate in old Rome, whose office seems in some particulars to have resembled that of our justices of peace.

The *edile*, ho! let him be apprehended.
Shakspeare.

EDINBURGH.

Edinburgh, the metropolis of Scotland, is situated in long. 3° 14′ W. from London, and lat. 55° 57′ N. It is surrounded on all sides, except to the northward, where the ground declines gently towards the Frith of Forth, by lofty hills. Arthur's Seat, Salisbury Crags, and the Calton-hill, bound it on the east; the hills of Braid, and the extensive ridge of the Pentland hills rise on the south; and the beautiful eminence of Corstorphine rears its summit on the west. These hills form a magnificent amphitheatre, in which, on elevated, though less lofty, ground, stands this flourishing city. It is said, with considerable propriety, to stand on three hills, which run in a direction from east to west; and hence its natural division into the southern, middle, and northern districts.

The origin of its name, like that of most other cities, is very uncertain. Some imagine it to be derived from Eth, a king of the Picts; others from Edwin, a Saxon prince of Northumberland, who over-ran the whole or greatest part of the territories of the Picts about A. D. 617; while others derive it from the Gaelic words Dun Edin, signifying the face of a hill. The name Edinburgh, however, seems to have been unknown in the time of the Romans. The most ancient title by which we find this city distinguished is that of Castelh Mynyd Agned; which, in the British language, signifies 'the fortress of the hill of St. Agnes.' Afterwards it was named Castrum Puellarum, because the Pictish princesses were educated in the castle (a necessary protection in those barbarous ages) till they were married. The most plausible derivation of the present name of the city seems to be that of the Northumbrian prince above mentioned. Simeon of Durham calls it Edwinesburch, and notices it as existing in the middle of the eighth century.

The most ancient part of the city, or Old Town, as it is called, stands on the middle or central ridge of the three eminences above mentioned, which is terminated on the west by a lofty and almost inaccessible rock, on which is placed the castle; the New Town occupies an elevated plain on the north; and the southern district is situated on a rising ground in the opposite direction. The hill on which the Old Town is built is separated from the other two districts by a valley on each side, that upon the northern side having been formerly a lake. In the progress of improvement, however, this lake having been drained, and streets and bridges having also been formed, these valleys are no impediment to a complete and ready communication from one district to another.

The peculiar situation of the Old Town has often attracted attention. The principal street, which occupies the flat surface of the central hill, extends nearly in a straight line from the castle, on the western extremity, to the palace of Holyrood-house on the east. This street, which is not improperly named the High Street, measures in length from the castle gate to the palace gate, about 5570 feet, and is about ninety feet in breadth. The upper part of it is elevated about 140 feet above the level of the drained morass of the North Loch; and, on account of the ground which it occupies gently declining to the east, is about 180 feet above the palace of Holyrood-house. The height of the houses in this quarter, has always rendered it an interesting object to a stranger visiting Edinburgh; and perhaps the High Street of this city is not equalled in grandeur by any street in Europe. Parallel to the High Street, in the valley on the south, runs a street called the Cowgate, from ten to twenty feet in breadth. The buildings in this street, though lofty, are less elevated than those of the High Street. From the High Street down to the loch on the north, and to the Cowgate on the south, run narrow cross streets or lanes, called wynds and closes, many of which, from the abrupt descent of the ground, are extremely steep and difficult of passage; an inconvenience not at all remedied by their width, which is rarely more than six feet.

The origin of this city is, likewise, involved in obscurity. The most absurd and fabulous accounts have been given of its first possessors; and, without sharing in the credulity of the monkish writers, no credit can be given to its remote annals. Situated in that part of the country which formed the Roman province of Valentia, and which, more than any other, was the subject of wars and devastations, it is almost impossible to trace its foundation. If we are to believe our earliest historians, however, the castle was built by Camelon king of the Picts, about A. A. C. 330. It was in the hands of the Anglo-Saxons, from the invasion of Octa and Ebufa in 452, till the defeat of Egfrid king of Northumberland in 685 by the Picts, who then repossessed themselves of it. The Saxon kings of Northumberland reconquered it in the ninth century; and it was retained by their successors till the year 956, when it was given up to Indulfus king of Scotland. In 1093 it was unsuccessfully besieged by the usurper Donald Bane. In 1128 King David I. founded the abbey of Holyrood-house, for certain canons regular; and granted them a charter, in which he styled the town 'Burgo meo de Edwinesbergh, my borough of Edinburgh'. In 1174 the castle was surrendered to Henry II. of England, to purchase the liberty of king William I. who had been taken prisoner by the English. But William afterwards entered into an alliance with Henry, and married his cousin Ermengarde; upon which the castle was restored as part of the queen's dower.

James II. in 1450 first bestowed on the community the privilege of fortifying the city with a wall, and empowered them to levy a tax upon the inhabitants for defraying the expense. This original wall of Edinburgh began at the foot of the north-east rock of the castle, where it was strengthened by a small fortress called the Well House Tower, and was carried quite across the hill, having a gate on the top as a communication between the town and castle. It at first proceeded eastward in such a manner, as would have cut off not only all the Cowgate, but some part of the parliament house; and turning to the

north-east was connected with the buildings on the north side of the High Street, at the original Netherbow Port; but after the battle of Floddon the wall of the city was extended. It now began on the south-east side of the rock on which the castle is built. From thence it descended obliquely, to the West Port; it then ascended part of a hill on the other side called the High Riggs; after which it ran east with but little alteration in its course, to the Bristo and Potter Row ports, and from thence to the Pleasance. Here it took a northerly direction, which it kept from thence to the Cowgate port, after which the enclosure was completed to the Netherbow by the houses of St. Mary's wynd. For 250 years the city of Edinburgh occupied the same space of ground. In the middle of the sixteenth century, it is described as extending in length about an Italian mile, and about half as much in breadth. This space of ground, however, was not at that time occupied in the manner it has been since. The houses of the Old Town were neither so high nor so crowded upon each other as they are now. These were consequences of the number of inhabitants increasing, which occasioned the raising of the houses to such a height, as perhaps is not to be paralleled.

The castle of Edinburgh stands on a high rock, accessible only on the east side. On all others it is very steep, and in some places perpendicular. It is about 300 feet high from its base, and 383 above the level of the sea. The entrance to this fortress is defended by an outer barrier of palisadoes; within this is a dry ditch, draw-bridge, and gate, defended by two batteries which flank it; and the whole is commanded by a half moon mounted with cannon. Beyond these are two gate-ways, the first of which is very strong, and has two portcullises. Immediately beyond the second gate-way, on the right hand, is a battery mounted with cannon, carrying balls of 12 and 18 lbs. weight. On the north side are a mortar and some gun batteries. The upper part of the castle contains a half-moon battery, a chapel, a parade for exercise, and a number of houses in the form of a square, which are laid out in barracks for the officers. There are also other barracks sufficient to contain 1200 men; a powder magazine, bomb-proof; a grand arsenal, capable of containing 8000 stand of arms; and other apartments which can contain full 22,000 more. On the east side of the square were formerly royal apartments; in one of which king James VI. was born. In this quarter, immediately under the square tower, is the apartment called the crown room, wherein are deposited the Scottish regalia; consisting of the crown, sceptre, and sword of state, which were placed here on the 26th of March, 1707. It was long doubted whether these ensigns of royalty had not been removed; but in 1818, when commissioners were appointed by his present majesty, then prince regent, to search for them, a large oaken chest in the crown room was forced open, and the relics of the Scottish monarchy were discovered. They were found in a state of the most perfect preservation, and have since been open to the inspection of the public. The crown room was neatly fitted up for the exhibition of them; and two persons, in the dress of the wardens of the tower, attended to show them to visitors. The governor of the castle is generally a Scottish nobleman; and there is a deputy governor, who resides in the garrison; also a fort-major, a store-keeper, master gunner, and chaplain. In its present improved state this castle can accommodate 2000 men; but its natural strength of situation was not sufficient to render it impregnable, even before the invention of artillery, much less would it be capable of securing it against the attacks of a modern army provided with cannon.

St. Giles's church is a beautiful Gothic building, measuring in length 206 feet. At the west end, its breadth is 110 feet, in the middle, 129; and at the east end, seventy-six. It is adorned with a lofty square tower, from the sides and corners of which rise arches of figured stone work; these, meeting with each other in the middle, complete the figure of an imperial crown, the top of which terminates in a pointed spire. The whole height of this tower is 161 feet. This is the most ancient church in Edinburgh, and its tutelar saint was St. Giles, a native of Greece. It was at first simply a parish church, of which the bishop of Lindisfarn or Holy Island, in the county of Northumberland, was patron. In 1466, it was erected into a collegiate church by James III. At the Reformation it was divided into several parts. The four principal divisions form as many churches appropriated to divine worship; the smaller ones to other purposes. At the same time the religious utensils belonging to it were seized and sold by the magistrates; part of the money being applied to its repair, and the rest added to the funds of the corporation. In the steeple are three ancient bells: there is also a set of music bells, upon which tunes are played by the hand. The principal division is called the High Church, in which the general assembly sits. The church is fitted up with seats for all the great officers of the assembly; and there is a throne for his majesty's commissioner. In this church is a monument to the celebrated Napier, inventor of logarithms; another to the regent Murray; and a third to the great marquis of Montrose. The names of the four churches, into which St. Giles's is divided, are, the New, or High Church, above described; the Old Church; the New North Church, or Haddow's Hole, so named from the Laird of Haddow having been for some time imprisoned in it; and the Tolbooth Church. The Tron Church is an elegant structure, erected in 1641, with a spire, and stands on the south side of the High Street, between the north and south bridges. The spire was burnt down in 1824, having accidentally caught fire from the burning embers blown by the wind from the great tenements on the west. Lady Yester's Church is situated nearly opposite to the Royal Infirmary. The Old and New Gray Friars churches are situated on the top of the south ridge, east of Heriot's Hospital, nearly in the middle of the ancient gardens belonging to the Gray Friars. These churches are both under one roof, and have one common portico; but are separated by a partition wall. The Old Gray Friars was

founded about 1612, and had once a steeple. Trinity College Church was founded by queen Mary, wife of king James II. in 1461, at the same time with the Trinity Hospital. It is situated at the east end of the north loch.

Canongate Church stands near the middle of the north side of the street called the Canongate, and was founded in 1688. It is a Gothic building, in the form of a cross, and was erected at the cost of about £2400, being the accumulated principal and interest of 20,000 merks, bequeathed by a Mr. Thomas Moodie, for the pious purpose of building a church. In the cemetery lie the remains of the celebrated author of the Wealth of Nations, Dr. Adam Smith; and a simple stone, erected at the expense of Burns, marks the burial place of his fellow-bard Ferguson. St. Cuthbert's Church, or the West Kirk, stands at the western extremity of the valley which divides the New from the Old Town, near the base of the castle rock. Its architecture is by no means elegant, but a handsome spire atones for the homely appearance of the church itself. It is deemed the largest place of worship in Edinburgh. St. Andrew's Church stands on the north side of George's Street, in the New Town, surmounted with a fine spire 168 feet in height. A portico, supported by four columns of the Corinthian order, projects a few feet into the street. In the spire there is a chime of eight bells. The whole is elegantly finished, and has a fine appearance. St. George's Church stands on the west side of Charlotte Square, and forms the terminating object of George's Street, from which it is seen along its whole extent. The front to the square consists of a portico, or vestibule, with four columns and two pilasters of the Ionic order, elevated on a flight of steps sixty-eight feet in width. Behind the portico rises a dome, intended as a miniature representation of that of St. Paul's, London. The whole building, with the exception of the dome, which is seen to advantage in almost every direction round the city, has a heavy appearance, and it has often been regretted that the original design of the celebrated architect, Adam, was abandoned merely with a view to economy. The building, as it stands, cost £33,000; but it has since been ascertained that, according to Mr. Adam's plan, the expense would have been considerably under that sum. This church was opened for public worship in 1814, and is calculated to contain 1600 people. The other churches of Edinburgh, remarkable for the elegance of their architecture, are St. Mary's Church, situated in Bellevue Crescent, opened for worship, in 1825; St. Paul's Chapel, on the north side of York Street, finished in 1818, at an expense of £12,000; St. John's Chapel, situated a little to the south of the western extremity of Prince's Street, also finished in 1818, at an expense of £15,000. St. George's Chapel, in York-place, built from a design by Robert Adam, in 1794; the Roman Catholic Chapel, at the head of Leith-walk, built from a design by Gillespie in 1813, possessing a very fine organ, and a beautiful altar-piece, painted by Vandyke; the Methodist Chapel, in Nicholson's-square, built in 1814, at an expense of £5000; Dr. Jameson's Chapel, at the south end of Nicholson-street, founded in 1819, and finished in 1820; Dr. Hall's Chapel, terminating the east end of Broughton Street. Mr. Paxton's Chapel, in Infirmary Street; and the Relief Chapel, Cowgate. The architecture of the other places of worship in Edinburgh, is not such as to require them to be particularly noticed on that account. Till of late years, the plainest and most homely accommodation was all that was aimed at in the erection of places of worship. Besides the churches and chapels already particularised, however, there are various others in this city of great importance, either for the extent of the congregations which they contain, or the celebrity and talents of their pastors. The Scottish Episcopal Church alone has several places of worship. There are also Lady Glenorchy's Chapel, and the Gaelic Chapel, in which latter the service is performed in the Erse language, for the benefit of the Highlanders: it was erected in 1769, and stood on the south side of the castle; but the congregation removed in 1815 to a more commodious place of worship, at the head of the Horse-Wynd. At present, the number of places for divine worship in Edinburgh and Leith, distinguishing the different persuasions, is as follow: Established Church, 16; Chapels of Ease, 9; Scottish Episcopal, 7; Cameronians, 1; United Associate Synod of the Secession, 9; Associate Synod, 1; Original Burgher, 1; Original Antiburgher, 1; Relief, 6; Independents, 3; Baptists, 4; Methodists, 2; Roman Catholics, 2; Glassites, 1; Society of Friends, 1; Bereans, 1; New Jerusalem Temple, 1; Unitarians, 1; Jews, 1: in all sixty-eight. The regular established clergy connected with Edinburgh are twenty-five. The number of parishes is sixteen, nine of which are called collegiate charges, or have two ministers each joined in the discharge of the pastoral office. Besides these there are, under the control of the established church, seven of the chapels of ease, as they are called; two of which are in the Canongate, one in the old part of the town, two in the southern district, one at Stockbridge, and one in Leith.

In 1215 this city was first distinguished by having a parliament and provincial synod held in it; but it does not appear to have been looked upon as the capital of Scotland till about the middle of the fifteenth century, when parliaments began to be held in it regularly, and when civil institutions succeeded to the rude military anarchy, which had previously prevailed. For the improvements which were introduced into the kingdom at that period, Scotland was chiefly indebted to her amiable and enlightened monarch, James I., who unfortunately fell a victim to the jealousy entertained by the nobility, of the measures he projected in favor of the people. In 1329 the town of Leith, with its harbour and mills, had been bestowed upon Edinburgh, by Robert I.; and his grandson, Robert III. conferred upon all the burgesses the singular privilege of building houses in the castle, upon the sole condition that they should be persons of good fame. From the middle of the fifteenth century, its privileges continued to be increased

from various causes. In 1482 the citizens had an opportunity of liberating king James III. from the oppression of his nobles, by whom he had been imprisoned in the castle. On this account the provost was by that monarch made hereditary high sheriff within the city, an office which he continues still to enjoy. The council, at the same time, were invested with the power of making laws and statutes for the government of the city; and the trades, as a testimony of the royal gratitude for their loyalty, received the celebrated banner known by the name of the Blue Blanket, which still exists, and is kept by the convener of the trades for the time. By the overthrow of James IV., at the battle of Flodden, Edinburgh was overwhelmed with grief, that monarch having been attended in his unfortunate expedition by the earl of Angus, then provost, with the rest of the magistrates, and a number of the principal inhabitants, most of whom perished in the battle. The inhabitants, alarmed for the safety of their city, enacted that every fourth man should keep watch at night; the fortifications of the town were renewed, and the wall extended, as we have before mentioned. After this, the inhabitants were gradually relieved from the trouble of watching at night, by a certain number of militia being appointed to prevent disturbances. About this period, the city was almost depopulated by a dreadful plague; so that, to stop if possible, the progress of the infection, all houses and shops were shut up for fourteen days; and some, where infected persons had died, were pulled down altogether. In 1540 the tract of ground, called the Burrough-muir, was totally overgrown with wood, and it was sagely enacted by the town-council, that whoever would purchase as much as was sufficient to make a new front for his house, might extend it seven feet into the street. Thus, while the city was, in a short time, filled with wooden houses, the streets were, in many instances, narrowed fourteen feet.

In 1542 an English fleet of 200 sail entered the Forth; and, having landed their forces, quickly made themselves masters of the towns of Leith and Edinburgh. They next attacked the castle, but were repulsed from it with loss; and by this were so enraged, that they not only destroyed both towns, but laid waste the country for a great way round. In 1547 Leith was again burned by the English after the battle of Pinkey, but Edinburgh was spared. Several disturbances happened in the capital at the time of the Reformation, of which an account will be given under the article SCOTLAND; but none of these greatly affected the city till 1570, when the civil war took place on account of queen Mary's forced resignation. The city was then sometimes in the hands of one party, and sometimes of another; during which the inhabitants, as may easily be imagined, suffered extremely. The earl of Morton, when regent, in 1573, built two bulwarks across the High Street, nearly opposite to the tolbooth, to defend the city from the fire of the castle. A treaty was at last concluded between the leaders of the opposite factions; but Kirkaldy refused to be comprehended in it. The regent therefore solicited the assistance of queen Elizabeth, and Sir W. Drury was sent into Scotland with 1500 foot, and a train of artillery. The castle was now besieged in form, and batteries raised against it in different places. The governor defended himself with great bravery for thirty-three days; but finding most of the fortifications demolished, the well choked up with rubbish, and all supplies of water cut off, he was obliged to surrender. The English general, in the name of his mistress, promised him honorable treatment; but the queen of England shamefully gave him up to the regent, by whom he was hanged. Soon after, the most violent religious commotions of Scotland took place, in which the king was insulted and railed at by the clergy, seconded by the magistrates of Edinburgh, as well as the citizens. This led to various severe measures against the city and ministers, which will be detailed under the article SCOTLAND. A reconciliation, however, at length took place, which appears to have been satisfactory to all parties, as the king not only allowed the clergy, some of whom had been degraded, to be replaced, but in 1610 conferred various marks of his favor on the town. Another invasion from England being apprehended in 1558, the city raised 1450 men for its defence, among whom there are said to have been 200 tailors.

In the beginning of the reign of Charles I., a perfect harmony seems to have subsisted between the court and the city: for in 1627 that monarch presented the city with a new sword and gown, to be worn by the provost. Next year he paid a visit to this capital, and was received by the magistrates in a most loyal manner. When this prince attempted to introduce Episcopacy into Scotland, his first step was the erection of the three Lothians, and part of Berwick into a diocese, Edinburgh being the episcopal seat, and the church of St. Giles the cathedral. Much disturbance was occasioned in 1637, by the first attempt to read the prayer-book there, and next winter the neighbouring people resorted to town in such multitudes, that the privy council thought proper to publish two acts; by one of which they were commanded, under severe penalties, to leave the town in twenty-four hours; and by the other, the court of session was removed to Linlithgow. The bishops on some of these occasions narrowly escaped with their lives. Notwithstanding these disturbances, however, the king again visited Edinburgh in 1641, and was entertained by the magistrates at an expense of £12,000 Scots. It does not appear that after this the city was in any way particularly concerned with the commotions which followed, either throughout the remainder of the reign of Charles I., the Commonwealth, or the reign of Charles II. In 1680 the duke of York, with his duchess, the princess Anne, and the whole court of Scotland, were entertained by the city in the Parliament House, at the expense of £15,000 Scots. At this time, it is said, that the scheme of building the bridge over the North Lough was first projected by the duke. An act passed in 1621, that the houses, instead of being covered with straw or boards, should have their roofs constructed of slate. tiles, or lead. This

act was renewed in 1667; and in 1698 an act was passed, regulating their height also. By this they were restrained to five stories, and the thickness of the wall determined to be three feet at bottom. In 1684, a lantern with a candle was ordered to be hung out in the first floor of every house, to light the streets at night. During the civil war, in 1649, the city was visited by the plague, when the infection was so violent, that it was almost depopulated, and the prisoners were discharged from the Tolbooth. In 1677 the first coffee-houses were licensed. The union, in 1707, had almost produced a war between the two kingdoms, which it was designed to unite, and on that occasion Edinburgh became a scene of the most violent disturbances, of which an account will be found under ENGLAND. During the time the act was passing, it was found necessary for the guards and four regiments of foot to do duty in the city. The disturbances were augmented by the disagreement of the two parties in parliament; and, notwithstanding the victory gained by the court, Sir Patrick Johnson, the provost, who voted for the union, was obliged afterwards to leave the country. In 1715 the city remained faithful to the royal cause; the city guard was increased, and 400 men raised at the public expense. The rebels, however, made themselves masters of the citadel of Leith; but, fearing an attack from the duke of Argyle, abandoned it in the night. A scheme was laid for their becoming masters of the castle of Edinburgh; but, being discovered, it failed, and a serjeant was hanged over the place where he had attempted to introduce the rebels. The loyalty of the city was equally remarkable in 1725, when disturbances were excited in Glasgow, and all parts of the kingdom, concerning the excise bill; for all remained quiet in Edinburgh, and government returned thanks to the magistrates for their vigilance. In 1736, however, the city fell under the royal displeasure, in the following singular manner:—Two smugglers having been condemned to be hanged, were conducted, as usual, each Sunday to the Tolbooth church, guarded by three soldiers. Having arrived there on one of these occasions before the congregation, one of the prisoners suddenly seized the guards, one in each hand, and the other in his teeth, calling out to his companion to fly, which he immediately did, and was never heard of afterwards. The smuggler who had thus saved the life of his companion without regard to his own, now became an object of general compassion; and the guard, who led him to execution, were severely pelted by the mob. Some of the soldiers were certainly wounded in the affair, and captain Porteous, who commanded the guard, was so much provoked, that he gave orders to fire, when six people were killed and eleven wounded. The evidence, however, of the fact, that the orders to fire were given, appears not to have been unexceptionable; nevertheless, on this ground, he was tried and condemned to be executed. The king was at this time in Hanover; and the case of the unfortunate Porteous having been represented to queen Caroline then regent, she granted him a reprieve; but such was the inveteracy of the people against him, that they determined not to allow him the benefit of the royal clemency. On the day that had been appointed for his execution, therefore, the crowd gradually increased, shut the gates of the city, and burnt the door of the prison. They then took out Porteous, whom the magistrates found it impossible to rescue from their hands, dragged him to the grass market, the usual place of execution, and hanged him on a dyer's sign-post. It was afterwards proved that a member of parliament went to the commander in chief, and requested that he would send a party of soldiers to quell the disturbance, but was denied this request, because he could not produce a written order from the provost. The mob throughout this popular affair were most determined, and in every other point most orderly in their conduct. As they had not brought a rope with them, they broke open a shop where they knew one was to be had; and having taken it, and left the money upon the table, retired peaceably. They even allowed the unhappy Porteous fifteen minutes to pray and sing psalms before hanging him. The English government felt this insult, however, deeply. A reward of £200 was offered by royal proclamation to any person who would discover those concerned; but all efforts were insufficient to produce any discovery: the magistrates and the city therefore were now called to account. The provost was imprisoned three weeks before he was admitted to bail; after which, he and the four baillies, with the lords of justiciary, were ordered to London to attend the house of peers. On their arrival, after some debate, it was agreed that they should attend in their robes at the bar; but their examination was, after all, dropped. A bill, however, passed both houses, by which it was enacted, that the city of Edinburgh should be fined in £2000, for the benefit of Porteous's widow; and the provost was declared incapable of ever afterwards serving the government.

In 1745 the city was invested by the Pretender's army; and, on the 17th September, was surprised and taken by a party of Highlanders. The inhabitants were commanded to deposit their arms at Holyrood House; certain stores were required from the city, under pain of military execution; and an assessment of 2*s*. 6*d*. in the pound was imposed upon the real rents. The Pretender's army guarded all the avenues to the castle, which however held out against him, and a communication was even preserved with the city for supplies. After the battle of Culloden, the provost of Edinburgh was tried both at London and at Edinburgh, for not defending the city against the rebels; but the jury, after having been allowed to adjourn, under heavy penalties, one day, and having been enclosed another, acquitted him. The duke of Cumberland caused, at this period, fourteen of the rebel standards to be burned at the cross. The city not having, during these commotions, elected the magistrates at the usual time, it became necessary to apply to the king for the restoration of its government. This was readily granted, the burgesses being allowed a poll; after which an entirely new set of magistrates was returned. With these transactions all interferences between the government and the metropolis of Scotland ended: the remainder of its history consists altogether of internal occurrences.

In 1716 the city bestowed a settled salary on the provost, in order to enable him to support the dignity of chief magistrate. This was at first £300, but has since been augmented to £500 which his lordship still enjoys. In 1718 it was recommended to the magistrates to distinguish themselves by wearing coats of black velvet, for which they were allowed £10; but this act being abrogated, in 1754, gold chains were assigned as badges of their office, which they continue to wear.

Tumults have been frequent in Edinburgh, and too often attended with the loss of lives. Those in 1740, 1763, and 1765, were occasioned by the dearness of provisions. One in 1742 was provoked by the custom of robbing the sepulchres of the dead for anatomical purposes: one in 1756 by the impressment of seamen for the war then commencing with France: one in 1760 began in consequence of the footmen of gentlemen interrupting the performances at the theatre: one in 1778 in a mutiny of lord Seaforth's Highland regiment: one in 1779 on account of the attempt to repeal the penal laws against the papists: one in 1780 on occasion of fifty Highland recruits having refused to embark at Leith for their appointed destination: one in 1784 from a belief that the distillers enhanced the price of meal by using unmalted grain: one in 1791 from political excitement on the king's birth-day. Another on the night of 31st December, 1811, was singular for its wantonness and atrocity. A band of young men, most of them under majority, but in numbers sufficient to set the regular police of the city at defiance, having armed themselves with bludgeons, assembled in the streets about eleven o'clock, then crowded with people on visits to their friends, as is usual on that night of the year, and proceeded to knock down and rob every person of decent appearance that came in their way. Their numbers prevented all resistance, and they kept possession of the streets till two o'clock of the morning of the new year. One watchman was killed; and, besides being robbed, many of the citizens were dangerously hurt. The activity of the police, however, soon traced out the leaders of this outrage: several of the rioters were seized on the spot. Four were tried and convicted, and three of these were executed on a temporary gibbet, erected on the middle of the High Street, on the 22d of April, 1812. None of them exceeded eighteen years of age.

In the autumn of 1822 Edinburgh was honored by a visit from his present majesty, George IV., which drew from all quarters of the country the grandest assemblage of people that had ever congregated in this ancient metropolis. Previously to his majesty's arrival, the palace of Holyrood House was repaired and fitted up with becoming elegance: triumphal arches were erected at Leith, where it was supposed he would land. A new carriage-way was formed from the great road over the Calton Hill to the front of the palace; the road through the park was opened; the Weigh House, which, but for this circumstance, might have encumbered the street for years, was removed, as if by magic. A road was formed from the chain-pier at Trinity, on the supposition that the king might land there; and, for a month previous to the actual event, all was bustle and activity, to a degree never before witnessed in the oldest remembrance. At length, when it was known that the royal fleet had actually anchored in Leith Roads, an indescribable multitude of all ranks, from the peer to the peasant, assembled on the shore to witness his majesty's landing, and the procession from Leith to Edinburgh, the order of which had been previously arranged by the authorities. This was on the morning of Thursday the 15th of August. At twelve o'clock a gun from the royal yacht announced that the king had embarked in his barge, which then moved on; and, as it passed up the harbour, the multitude rent the air with acclamations. His majesty was received on a platform, covered with scarlet cloth, by the duke of Dorset, and other peers; the judges of the supreme courts, and the magistrates of Leith; all of whom he shook cordially by the hand. He then proceeded to an open carriage, drawn by eight beautiful bays, amid the continued cheers of the people; and, after being seated, with the duke of Dorset and the marquis of Winchester, it drove off at a slow pace, guarded by the Royal Company of Archers, and a detachment of the Scotch Grays. The procession now moved up Leith Walk, and, when the cavalcade had approached the barrier near Picardy Place, the lord provost, accompanied by the magistrates, presented his majesty with the silver keys of the city; after which they returned to their carriages, and took their places immediately after the lord lieutenant of the county, preceded by their officers. The procession then passed slowly by York Place, turned up St. Andrew's Square, and moved along Prince's Street to the Regent Bridge, Waterloo Place. On entering this splendid street, his majesty expressed his surprise and delight at the beautiful coup d'œil presented by the objects before him. Arthur's Seat in the distance—the Calton Hill at hand—buildings on every side of the most elegant structures—all terraced with human beings. At two o'clock the royal carriage reached Holyrood House; his majesty's arrival at which was announced by salutes of artillery from the Castle, Salisbury Crags, and the Calton Hill. After receiving the congratulations of the magistracy, and other authorities, his majesty drove off to Dalkeith House, which had been previously prepared for his residence. Fire-works were exhibited at Charlotte Square in the evening; and the following night there was a general illumination. It would require much more space than the limits of this work permit, to detail all that passed during his majesty's visit, or describe the general enthusiasm with which he was received. The crowds of well-dressed people in the streets—the numerous clans in their various costumes—the number of equipages—the variety of amusements—and the universal expression of good humor and delight, which every where prevailed, will not soon be forgotten by the citizens of Edinburgh.

Almost the only events of importance which we need now notice, are the great fires which occurred in this city in the year 1824. In June that year a fire took place, beginning at the

Royal Bank Close, which totally destroyed the houses in the upper part of the south side of the High Street, and the eastern angle of Parliament Square. This was followed by one of a still more calamitous nature in November of the same year. It began on the evening of Monday the 15th, at the head of the Old Assembly Close, and continued to increase and spread its ravages on every side with irresistible fury, till it became one grand and terrible conflagration, which threatened destruction to the whole of the old city. It was not subdued till it had laid the fairest part of the principal street in ruins, annihilated the whole houses of several lanes leading from the High Street to the Cowgate, and destroyed all the buildings of Parliament Square, except those connected with the parliament house. Fortunately the loss of life was not great. Four individuals only were killed, and twelve carried to the infirmary severely hurt. The calamity to the unfortunate persons who were rendered houseless, was also greatly lessened by a prompt and liberal public subscription on their behalf. Another fire took place in the High Street in February, 1825, which at its commencement threatened similar devastations, but the flames were happily subdued after the destruction of one large old tenement, and a few smaller houses adjoining it. Edinburgh, like London, partook of the general mania which prevailed in 1825 for speculating in Joint Stock Companies. Stock-jobbing, for the first time, became a business or profession in the Scottish metropolis; and schemes, as wild as the celebrated South Sea Bubble in England, or Mississippi scheme in France, promised to triumph over the characteristic prudence and proverbial caution of the people. The number and the variety of the public companies, which were either set a-going or projected within the short space of six months, excited astonishment for a time, but latterly they became the subject of ridicule; and, when some of the London bubbles fortunately burst, the delusion became so apparent, that all further undertakings in the joint-stock line immediately ceased. That some of the companies which were established at that time may turn out productive to the parties who embarked in them it would be unfair to doubt; but many of them will eventually prove sad lessons to individuals of the folly of rash and ill-timed speculation.

The charitable institutions and general improvements of Edinburgh will now engage our more distinct attention. I. Of the former, the most important is Heriot's Hospital, finely situated on a rising ground to the south of the Castle Hill. It owes its foundation to George Heriot, goldsmith to James VI., who at his death, after having provided for his relations, left to the magistrates and ministers of Edinburgh the residue of his fortune, amounting to £29,325 10*s.* 1½*d.*, 'for the maintenance, relief, and bringing up of so many poor and fatherless boys, freemen's sons of the town of Edinburgh,' as that sum should be sufficient for. It was founded in July 1628, according to a plan of Inigo Jones; but, the work being interrupted by the civil wars, it was not finished till 1650. The expense of the building is said to have been upwards of £27,000, and the hospital is now possessed of an income of about £5000 per annum, and is rapidly increasing. In this hospital the boys are taught English, Latin, Greek, and French, writing, arithmetic, book-keeping, mathematics, and geography; and for any other branch of education that may be required they attend masters out of the hospital, who are paid from the funds. The age of admission is from seven to ten, and the boys generally leave the hospital at fourteen; but, if necessary to prepare them for the university, they are retained for a longer period. Those wishing to follow any of the learned professions, are sent to college for four years after leaving the hospital, with an allowance of £30 per annum. Boys going out as apprentices to trades, are allowed £10 annually for five years, and £5 at the leaving of their apprenticeship. At present the number of boys is 180. The whole management is vested in a treasurer, appointed by the magistrates of Edinburgh, under whom are a house-governor, house-keeper, and the masters in the different branches of learning. II. Watson's Hospital; so named from its founder, George Watson, who, dying a batchelor in 1723, left £12,000 for the maintenance and education of the children and grand-children of decayed members of the Merchants' Company of Edinburgh. The scheme, however, was not put in execution till 1738, when the sum originally left had accumulated to £20,000. The present building was then erected, in which about eighty boys are maintained and educated. It stands on the south side of the city, a little to the south of Heriot's Hospital; and was erected at the expense of £5000. It is under the management of the master, assistants, and treasurer of the Merchants' Company, four old bailies, the old dean of guild, and the two ministers of the old church. The boys are genteelly clothed and liberally educated. III. The Merchants' Maiden Hospital was established by voluntary contribution in 1695, for the education and maintenance of daughters of merchant burgesses of Edinburgh. The governers were erected into a body corporate, by act of parliament, in 1707. The annual revenue is £3000. About eighty girls are maintained and educated; the majority of whom, on leaving the house, receive £3 6*s.* 8*d.* But, for the encouragement of merit, those who are found superior to the generality in the acquisition of their education, are allowed £8 6*s.* 8*d.* IV. The Trades' Maiden Hospital was founded in 1704 by the incorporation of Edinburgh, for the maintenance of the daughters of decayed members, on a plan similar to that of the former. Mrs. Mary Erskine, a widow gentlewoman of the family of Marr, contributed so liberally, that she was by the governors styled joint-governess of the hospital. About fifty girls are maintained in it, and, when they leave it, receive a bounty of £5 11*s.* 1½*d.* V. The Orphan Hospital was planned in 1732, by Andrew Gairdner, merchant, and other inhabitants. The revenue is inconsiderable, but the institution is supported by the contributions of charitable persons. Into this hospital orphans are received from all parts of the kingdom. About 150 are maintained in it. It is situated to the eastward of the north bridge; and is a

handsome building, consisting of a body and two wings, with a neat spire, furnished with a clock and two bells. The philanthropic Mr. Howard reckoned this institution one of the most useful charities in Europe, and a pattern for all others of the kind. VI. The Trinity Hospital was founded in 1461, by the queen of James II. At the Reformation it was stripped of its revenues; but the regent afterwards bestowed them on the provost of Edinburgh. The hospital was after this repaired, and appointed for the reception of poor old burgesses, their wives, and unmarried children, not under fifty years of age. It is situated at the foot of Leith Wynd, and comfortably maintains about forty of both sexes, who have each a room for themselves. There is a small library for their amusement, and they have a chaplain. About 100 out-pensioners have £6 a year each. The funds are under the management of the town council. VII. The Charity Workhouse was erected in 1743, by voluntary contributions. It is a large plain building, situated in the south district of the city. The only permanent fund for defraying the expense of this establishment is a tax of two per cent. on the valued rents of the city. The rest is derived from collections at the church doors and voluntary contributions; but, as these always fall short of what is requisite, recourse is frequently had to extraordinary collections. In 1813 it was found necessary to raise the assessment on the valued rents from two per cent. to five. The levy at the present time is at the rate of three and a half per cent. The number of inmates, men, women, and children, including about seventy lunatics, average from 800 to 900, and the average expense of maintaining each person is £8 2*s*. 5½*d*. per annum. There are two other charity workhouses in the suburbs, much on the same plan with that now described; one in the Canongate, and the other in St. Cuthbert's or West Kirk parish. VIII. Gillespie's Hospital, founded about 1796 by James Gillespie, of Spylaw, famous as a manufacturer of snuff in Edinburgh. Besides supporting a considerable number of aged persons of both sexes, this institution educates 100 boys gratis in a school erected for that purpose.

The Edinburgh Royal Infirmary was first projected in 1721, but, the proposals which were published not receiving encouragement from the public, the design was dropped till it was again taken up by the College of Physicians in 1725. After considerable difficulty and delay, £2000 was procured, and a small house was opened for the reception of the sick poor in 1729. At length, the stock having increased to £3000, a royal charter was obtained to erect the subscribers into a body corporate, and in 1738 the foundation of the present structure was laid, and the building speedily executed. From that time forward donations were constantly received in aid of its funds; some of them of princely munificence. This establishment is attended by two physicians, chosen by the managers, who visit their patients daily, in presence of the students, The members of the College of Surgeons also used to attend in rotation according to seniority, but that plan has been altered, and the patients are committed to the care of particular surgeons, chosen annually by the managers. The building consists of a body and two wings, each three stories high, with an attic story, and very elegant front. The body is 210 feet long, and thirty-six broad in the middle. The wings are seventy feet long and twenty-four broad. In the different wards, 228 patients may be accommodated, in distinct beds. There are cold and hot baths for the patients, and also for the citizens; but to these last the patients are never admitted. The theatre will hold upwards of 200 spectators. There is also a military ward, in consequence of which a small guard is always kept at the infirmary. From 3000 to 4000 patients are now admitted annually; and the yearly revenue of the establishment is £5000.

The first public Dispensary of Edinburgh was founded by Dr. Duncan in 1776, for the poor whose diseases are of such a nature as to render their admission into the infirmary either unnecessary or improper. Here the patients receive advice gratis four days in the week: a register is kept of the diseases of each, and of the effects produced by the medicines employed. All patients, not improper for dispensary treatment, are admitted on the recommendation of the elder or church-warden of the parish where they reside. A similar establishment was founded in 1815, called the New Town Dispensary, for the accommodation of the poor in the northern parts of the city. It has also a midwifery department, under the superintendence of an able physician. Both Institutions afford gratuitous vaccine inoculation. The expense of the medicines and the support of the general establishment at each are defrayed by voluntary subscription. A donation of one guinea, annually, entitles the contributor to recommend patients, and to be a governor for two years; and five guineas confers the same privilege for life. Dispensaries for diseases of the eyes and ears were also established in 1822, and institutions of the same kind for other maladies exist in different quarters of the city.

The charitable institutions thus particularised are, in point of antiquity and importance, the most remarkable in the Scottish metropolis; but there are others, also, of a very valuable nature, the mere enumeration of which will demonstrate that this city is as distinguished for humanity and benevolence, as it has long been for science and literature, and all the arts that tend to improve and adorn life. The following flourish vigorously at the present time:—1. 1. The Lying in Hospital. 2. The Asylum for the Blind. 3. The Lunatic Asylum. 4. The Magdalen Asylum. 5. The Institution for educating Deaf and Dumb Children. 6. The Repositories. 7. The Ministers' Widows Fund. 8. The Society for the Sons of the Clergy. 9. The Society for Relief of the Destitute Sick. 10. Horn's Charity. 11. Walson's Bequest. 12. Thomson's Bequest. 13. Dr. Robert Johnson's Bequest and Strachan's Legacy of Craigcook. 14. The Society for the Suppression of Begging. 15. Savings Banks. 16. The Institution for the Relief of Incurables. 17. The Association for the Relief of Imprisoned Debtors. 18. The House of Industry. 19. The Society for Clothing

the Industrious Poor. 20. The Society for promoting Religious Knowledge among the Poor. 21. The Society for the Relief of Indigent Old Men. 22. Two Female Societies for Relief of Indigent Old Women. The funds for all or most of these societies, are chiefly derived from contributions among the charitable, and the collections at occasional sermons.

The modern improvements of Edinburgh were commenced in 1753, at which time the city occupied the same space of ground that it had done for centuries before. When the foundation stone of the Royal Exchange was laid that year, there was a grand procession, and the greatest concourse of people ever remembered in Edinburgh. In 1756 the High Street was cleared by the removal of the cross; which many regretted, as it was a very ancient and elegant building. In 1763 the first stone of the north bridge was laid; and in 1767 an act of parliament was obtained, for extending the royalty of the city over the fields to the northward, where the New Town is now situated. In 1774 the foundation of the Register Office was laid; and so rapidly did improvements proceed for several years, that we find in 1778 St. Andrew's Square, and the streets immediately connected with it, on the original plan of the New Town, were nearly completed. In 1784 the project for rendering the access to the town equally easy on both sides was begun to be put in execution, by laying the foundation of the South Bridge. At the same time a great improvement was made, by reducing the height of the street several feet, all the way from the place where the cross stood to the Netherbow. The street was farther cleared by the removal of the town guard-house, which had long been complained of as an incumbrance. The great earthen mound across the north loch, connecting the new and old town to the west of the North Bridge, was commenced about the same period. In 1789 the new buildings of the University were begun, but, being on a scale far beyond the means possessed for completing them, they stood for many years unfinished; and it was not till 1815, when the exertions of Mr. John Marjoribanks, then lord provost and M. P., procured £10,000 in aid of the undertaking from parliament, and a recommendation to grant the same sum annually for seven years, that plans for its completion were adopted. The next improvement undertaken was the alteration in the old Parliament House, which was begun by the erection of a court-room and apartments for the Barons of Exchequer, and an open arcade in the front of the old building. The original plan included, also, an additional room for the second division of the court, a library room for the advocates and writers to the signet, and a county hall; all of which are now erected. A new prison was intended to be built about the same time with the earliest of these improvements on the Parliament House; but, from some objections raised to the site fixed on for its erection, the design was postponed for a time; and it was not till after an act of parliament for further improving the city had passed, in 1814, that the building of a new gaol was carried into effect. In 1815 Regent Bridge, over the low ground which divided Prince's Street from the Calton Hill, was begun, together with the adjacent buildings, and it now forms an entrance of unequalled grandeur to the city. The new prison, begun in the same year, stands at its eastern termination, and on the opposite side a public hall has been erected by the incorporated trades of Calton. On the south side are the Stamp-office and Post-office, surmounted with the royal arms, and opposite to the last is a handsome building called the Waterloo Hotel. In 1817 the old Town was much improved by the removal of the remains of the range of old houses which incumbered the middle of the High Street. The old Tolbooth and Creech's land, the two extremities of the range, were taken down that year, and the Weigh-house followed them in 1822. In 1818 a canal was begun at the west end of the city, to be carried westward till it joined the Forth and Clyde canal about a mile beyond Falkirk. This undertaking was finished and open for trade and passage boats in 1822. Its estimated expense was £240,500, which was raised in shares of £50 each. The depth of this canal is five feet, and its width at the surface forty feet, contracting to twenty-two feet at the bottom. Few of the recent improvements promise to be so beneficial to the city and surrounding country as this. It has already had the effect of diminishing the price of coals to the citizens one-third. Besides these important undertakings, many other improvements have been going on at the same time, which a volume would hardly suffice to describe with accuracy. We may, however, mention the following, as having been finished since 1813. Two elegant episcopal chapels, St. George's Church in Charlotte Square, a catholic chapel, a new merchants' maiden hospital, a lunatic asylum, a new observatory, lord Melville's monument in St. Andrew's Square, St. Mary's Church, a house for the education of the deaf and dumb, and the Edinburgh Academy. Also numerous streets and ranges of the most elegant buildings, to the north of Queen Street, extending the city in that direction to the water of Leith, and eastward towards the town and port of Leith.

The Northern District, or New Town, consists of two divisions: the one includes the property laid off for building in 1767; and the other consists of all the additional ground occupied by the buildings erected or erecting to the east, west, and north of the former. The principal streets of the first division are George's Street, Prince's Street, and Queen's Street, running longitudinally in straight lines, and forming a parallelogram, which is intersected at right angles by seven streets, running north and south. This district also comprehends various elegant squares, and some of the finest public buildings. But, generally speaking, the houses are inferior to those of more recent erection in other parts of the city. The second division of the New Town comprehends the streets which descend from Queen's Street, to the north, and those which intersect them from east to west, together with all the recent improvements on the earl of Moray's grounds, the Warristar grounds, and the fields in the neighbourhood of Stockbridge. For the elegance of its buildings and the general advantages of situa-

tion and plan, this division has not, perhaps, its equal in the world. When the whole of the grounds now comprehended in what is called the New Town, are added to the southern and middle districts, the circumference of Edinburgh, is nearly eight miles.

The tribunals of Edinburgh have, in general, splendid accommodations. The judges of the session justiciary and exchequer courts hold their sittings within the buildings called the parliament house, in the great hall of which the Scottish parliament used to meet previous to the union. This hall is the only part of the ancient building which remains in its original state, the other apartments having undergone many alterations within these few years. It is 122 feet long by forty-nine broad, and has a fine arched roof of oak, painted and gilded. A fine statue of the late Viscount Melville, by Chantry, stands on a pedestal near the north end of it. The court of session, before its division into chambers, sat in a room adjoining to the great hall, formerly appropriated for the meeting of the privy council. This apartment, after the division took place, was enlarged and fitted up for the judges of the first division, and a marble statue of the late President Blair, by Chantry, was, in 1818, placed behind the chair of the presiding judge. A new room was likewise erected for the second division, entering from the west side of the great hall; and a statue of president Forbes, which formerly stood in a niche in the outer hall, was removed to this room and placed behind the chair of the lord justice Clerk. This statue was executed by the celebrated sculptor Roubiliac, at the expense of the Faculty of Advocates. An addition was likewise built to the Parliament House in 1819, containing two court rooms for two of the lords ordinary, and a new room for the faculty library. This library, which is one of the most valuable in Britain, now occupies apartments worthy of the rich and rare literary treasures which it contains. The library of the writers to the signet is kept under the same roof. In the centre of the square fronting the Parliament House, there is an elegant equestrian statue of Charles II., which has been much admired. It was cast in Holland, and cost £215. The original Parliament House buildings, as they stood prior to the recent additions and improvements, were begun in 1632, finished in 1640, and cost, what was then deemed, the enormous sum of £11,600 sterling. At the western extremity of the new library rooms of the advocates and writers to the signet, stands a magnificent county hall, the plan of which was taken from one of the finest models of antiquity, the temple of Erectheus, in the Acropolis of Athens. The principal entrance is taken from the Choragic monument of Thrasyllus. The interior of this building is laid out in a large hall, a court room, a committee room, and, in the principal floor, for the use of the freeholders of the county. The other floors are occupied as offices for the sheriff, sheriff-clerks, &c. The expense of its erection was £15,000. It was finished in 1819. The accommodations afforded for the inferior law establishment of Edinburgh, if not nearly so splendid, are generally as commodious as those we have thus described.

The North Bridge, which forms the main passage of communication between the Old and New Towns, was founded in 1763, but the contract for building it was not signed till August 21st, 1765. The architect was Mr. William Mylne, who agreed with the town council of Edinburgh to finish the work for £10,140, and to uphold it for ten years. It was also to be finished before Martinmas 1769; but on the 8th of August that year, when the work was nearly completed, the vaults and side walls on the south fell down, and nine people were buried in the ruins. The bridge was repaired, by pulling down some parts of the side walls; afterwards rebuilding them, and strengthening them with chain bars. The whole was supported at the south end by very strong buttresses and counterforts on each side; but on the north it has only a single support. The length of the bridge, from the High Street in the Old Town to Prince's Street in the New, is 1125 feet; the total length of the piers and arches is 310 feet. The width of the three great arches is seventy-two feet each; of the piers thirteen feet and a half; and of the small arches, each twenty feet. The height of the great arches from the top of the parapet to the base, is sixty-eight feet; the breadth of the bridge within the wall over the arches is forty feet, and the breadth at each end fifty feet. The communication betwixt the two towns by this bridge, though very complete and convenient for such as lived in certain parts of either, was yet found insufficient for those who inhabited the western districts. Another bridge being therefore necessary, it was proposed to raise an earthen mound, by filling up the valley with the rubbish dug out in making the foundations of houses in the New Town; and so great was the quantity, that this was accomplished so as to be fit for the passage of carriages in less than five years. Whilst the mound was forming it sunk at different periods above eighty feet on the west side, and was again filled up: 1800 cart-loads of earth were, upon an average, laid upon this mound every day. It has been said, with justice, to be a work unrivalled by any but Alexander the Great's at Tyre.

The South Bridge is directly opposite to the North, so as to make but one street, crossing the High Street almost at right angles. It consists of twenty-two arches of different sizes; but only one of them is visible, viz. the large one over the Cowgate; and even this is small, in comparison with those of the North Bridge, being no more than thirty feet wide and thirty-one feet high. This bridge was erected with a design to give an easy access to the great number of streets and squares on the south side, as well as to the country on that quarter from which the city is supplied with coals. So great was the rage for purchasing ground on each side of it for building, that the areas sold by auction at £50 per foot in front. They sold higher than ever was known in any city.

Regent Bridge terminates Prince's Street, the southern boundary of the New Town, at the east. This bridge, in connexion with the adjoining buildings, is one of the most splendid of the

recent improvements. It was begun in 1815, and finished in 1819. It now forms the principal entrance into Edinburgh from the new London road, by the south side of the Calton hill. The arch over the low Calton is semi-circular, and fifty feet wide. At the north front it is forty-five feet in height, and at the south front sixty-four feet two inches, the difference being occasioned by the ground declining to the south. The roadway is formed by a number of reverse arches on each side. The great arch is ornamented on the south and north by two open arches, supported by elegant columns of the Corinthian order. The whole property purchased to open up the communication to the city by this bridge cost £52,000, and the building areas sold for the immense sum of £35,000. The street along the bridge is called Warterloo Place, as it was founded in the year on which that memorable battle was fought, and was intended to commemorate the event.

The observatory is seated on the top of the Calton hill, and is furnished with all the instruments necessary for astronomical observations. The scheme for the erection of it was first adopted in 1736; and the earl of Morton and Mr. M'Laurin, professor of mathematics, each contributed to its erection. The foundation stone was laid by provost Stodart, on the 25th of August 1776. But Mr. Adam the architect, conceiving the idea of giving the whole the appearance of a fortification, accordingly a line was marked out for enclosing the limits of the observatory, and of having Gothic towers at the angles. Thus the money designed for the work was totally exhausted, and the observatory long remained unfinished. In 1792, however, the building was completed by the magistrates. But it was not till 1812, when the astronomical institution was founded, that it was furnished with a set of philosophical instruments. In 1818 a new observatory was built a little to the east of the old one. It is now under the most superior scientific management, and while we write we observe a public announcement of his majesty's having bestowed £2000 upon it to purchase instruments.

The palace of Holyrood House, is the only royal habitation in Scotland, that is not in ruins. It is a handsome square of 230 feet in the inside, surrounded with piazzas. The front, facing the west, consists of two double towers joined by a beautiful low building, adorned with a double balustrade above. The gateway in the middle is decorated with double stone columns, supporting a cupola in the middle, representing an imperial crown, with a clock underneath. On the right hand is the great staircase, which leads to the council chamber and the roya apartments. These are large and spacious, and in one of them the Scottish peers meet, to elect sixteen of their number to represent them in the British parliament. The gallery is on the left hand, and measures 150 feet by 27½. It is adorned with the supposed portraits of all the kings of Scotland, from Fergus I. to James VII. In the apartments of the duke of Hamilton, which he possesses as hereditary keeper of the palace, queen Mary's bed of crimson damask, bordered with green fringes and tassels, is still to be seen, but almost reduced to rags. Here also strangers are shown a piece of wainscot hung upon hinges, which opens in a trap-stair communicating with the apartments below. Through this passage lord Darnley and the other conspirators rushed in to murder the unhappy Rizzio. Towards the outward door of these apartments are large dusky spots on the floor, said to have been occasioned by Rizzio's blood, which could never be washed out. But a very slight degree of skill in chemistry is sufficient to perpetuate a miracle of this kind. The front of this palace is two stories high; the roof flat; but at each end the front projects, and is ornamented with circular towers at the angles. Here the building is much higher. Great part of it was burnt by Cromwell's soldiers; but it was repaired and altered into its present form after the Restoration. The fabric was planned by Sir William Bruce, a celebrated architect, and executed by Robert Mylne, mason. The environs of the palace afford an asylum for insolvent debtors; and adjoining to it is a field called St. Anne's Yards; beyond which there is an extensive park, called the King's Park, which, with the Duke's Walk, and the hills of Arthur's Seat, Salisbury Crags, and St. Leonard's Hill, are all within the privilege of the sanctuary. The abbey church, built by David I. in 1128, has been long in ruins. See HOLYROOD HOUSE. About the year 1795 some of the chief rooms of the palace were fitted up for the reception of part of the royal family of France, when proscribed and exiled from their native kingdom.

Edinburgh is divided into ten parishes, of which there are nine in the old city, named after the nine oldest churches, and one in the new town: besides the Canongate, and St. Cuthbert's, or West Kirk parishes; and those of South and North Leith; in all sixteen, included in the public enumerations of the inhabitants. It has a weekly general market on Wednesday, and an annual fair called Hallow Fair, in November, which lasts a week. The markets of Edinburgh are plentifully supplied with all sorts of provisions. Fresh butchers' meat, as well as fowl and fish, may be had every day; and no city can be better supplied with garden stuffs. A remarkable instance of the plenty of provisions with which Edinburgh is supplied was observed in 1781, when several large fleets, all of them in want of necessaries, arrived in the Forth, to the amount of above 600 sail, and having on board at least 20,000 men; yet the increased consumption of provisions, which certainly ensued upon the arrival of so many strangers, made not the least increase in the rate of the markets, insomuch that several victualling ships, sent down by London merchants, returned without opening their hatches. The city mills are let to the corporation of bakers in Edinburgh; and the bread made in the city is remarkable for its good quality. The revenue of the city, arising partly from duties of different kinds, and partly from landed property, is upwards of £45,000 sterling per annum; but the

places of profit and emolument at the disposal of the town council, may be estimated at not less than £30,000.

The Theatre stands nearly opposite to the Register Office, in Shakspeare Square. The building is exceedingly plain externally, its only decorations being a statue of Shakspeare, and emblematical figures of tragedy and comedy on the top of the front. But it is elegantly fitted up within. This building was first opened as a place for theatrical performances in 1769; after much opposition from the clergy, who, for many years, had displayed the greatest hostility to every amusement of the kind. It was originally built by patent from the crown; and the prices of admission were then, three shillings for the boxes and pit, two shillings for the first gallery, and one shilling for the second or upper gallery. At these rates the house could hold with ease about £140. But the box seats were afterwards raised to four shillings, and subsequently in 1815 to five shillings. The seats in the pit and galleries still remain at the old rate. In 1809 the patent was acquired by Mr. Henry Siddons, who was at that time manager, and who continued to conduct it till he died in 1815. It has since been under the management of Mr. Murray, his brother-in-law, who, in addition to a regular company of excellent performers, presents the public at intervals with all the actors and actresses of eminence that appear on the boards of Drury Lane and Covent Garden.

Musical Entertainments, on a scale of great extent and in the highest perfection, have been frequent in Edinburgh, and the records of them go as far back as 1695. In 1672 a music hall was purposely erected at the foot of Niddry Street, after the model of the great Opera Theatre in Parma. This institution flourished for about seventy years, and was a favorite resort of the fashionable society of Edinburgh during the greater part of that time. Admission was obtained by special tickets, not transferable, and which were always gratis, except when benefits were given for the emolument of professional performers. The society, however, at length broke up, and the entertainments began to be gradually neglected. The hall was then disposed of for other purposes, and, after being some time occupied as a Baptist meeting-house, it was purchased in 1812 by the Grand Lodge, and has since been known by the name of Freemasons' Hall. After the weekly concerts of this society were discontinued, subscription concerts were performed in the Assembly Rooms, George's Street, and at Corri's Rooms, formerly the Circus, now the Caledonian Theatre. Musical festivals on a plan similar to that of the Oratorios in London, have also thrice taken place in Edinburgh, for the benefit of the public charities.

New Assembly Rooms were erected in George's Street, not unsuitable to the general elegance of the other buildings in the New Town, in 1787. The principal hall is ninety-two feet long, forty-two feet wide, and forty feet in height. There are also a Tea Room, two Card Rooms, and a Grand Saloon. Two Assemblies are held weekly through the winter, the one a dancing, the other a card assembly. The card parties are rather select than numerous; but the dancing assemblies are well frequented. The Caledonian, a minor theatre, is the only other place of public amusement which our limits will permit us to particularise. This building was originally erected for equestrian exhibitions, and called the Royal Circus. It was subsequently converted into a place of worship, but after various changes, was fitted up as a minor theatre, in 1822.

No city in the world affords greater security to the inhabitants in their persons and properties than Edinburgh. Robberies are rare, and street murder hardly known; so that a person may walk out at any hour of the night in perfect security. This, in former times, was, in a great measure, owing to the vigilance of a town-guard. In 1700 it consisted of 126 men. From that time it continued embodied till the year 1805, when a new system of police was adopted. It was then reduced to an officer and thirty men, as a guard to the lord provost; and this last remnant was finally disbanded in 1817, when the old Tolbooth was taken down, the lower part of which had been occupied as their guard-room. The arms of this ancient body of men were the same as those used by the king's forces in general, but, in their capacity of night watchmen, they used a weapon called a lochaber axe, the use of which had long been discontinued in every other place. In addition to the town-guard, there was also a body of Militia, called the Trained Bands, consisting of 1600 men; but they have also been long dissolved. The officers, however, are still elected annually, and the provost, ex officio, bears the title of colonel as their commander.

In 1805, the town-guard being found inadequate to preserve the peace of the city and protect the inhabitants in its extended state, an act of parliament was applied for, and under its sanction a new system of police was established. By this statute the city was divided into wards, and commissioners were appointed for each ward, for the purpose of assessing the inhabitants in the expense of the establishment, and for other duties. A court was also established, with a judge of police and clerk, for the trial of offences; and the judge was empowered to punish by fine and compensation for damages, by imprisonment in jail, or by commitment to Bridewell. The examination of the offender and witnesses was taken instanter and vivâ voce, and the sentence pronounced was immediately executed. After an experiment of nearly seven years, this system was found not to answer in consequence of the extravagant powers which had been given to the court. A new bill was accordingly brought into parliament, and an improved system was established in 1812, the office of judge of police being abolished. The city was divided into twenty-six wards, with three resident commissioners for each; the sheriff of the county and the magistrates of the city were appointed judges; a superintendent was also appointed, and various enactments provided for the cleansing, watching, and paving of the streets, and for other matters of general police. This statute was further amended in 1822. In addition to the superintendent there are now three lieutenants and a clerk. The expense of the establishment for the year 1824 was £20,292 6*s*. 5*d*.

levied at the rate of one shilling in the pound on a rental of £373,736.

The town council of Edinburgh has the direction of all public affairs. The ordinary council consists of twenty-five persons; the extraordinary, of eight, making in all thirty-three. The whole is composed of merchants and tradesmen, whose respective powers and interests are so interwoven, that a sort of balance is preserved between the two bodies. The members of the town-council are partly elected by members of the fourteen incorporations, partly by their predecessors in office. These incorporations are, the companies of the surgeons (also erected into a royal college), goldsmiths, skinners, furriers, hammermen, wrights, masons, tailors, bakers, fleshers, cordiners (or shoemakers), weavers, waukers, bonnet-makers, dyers, and merchants'. The lord-provost of Edinburgh, who is styled right honorable, is high sheriff, coroner, and admiral, within the city and its liberties, and the town, harbour, and road of Leith. He has also a jurisdiction in matters of death, now in desuetude. He is preses of the convention of royal boroughs, colonel of the trained bands, commander of the city guard and of the Edinburgh jail; has the precedency of all the great officers of state and of the nobility, walking on the right hand of the king, or of his majesty's commissioner, and has a sword and mace carried before him. Under him are four magistrates called bailies, whose office is much the same with that of the aldermen in London, excepting that they continue in office only one year. There is also a dean of guild, who has the charge of the public buildings, and without whose warrant no house or building can be erected within the city. He has a council to consult with a nominal treasurer, who formerly had the keeping of the town's money, which is now given to the chamberlain. These seven magistrates are elected annually; and with the seven of the former year, three merchants' and two trades' counsellors, and fourteen deacons, making in all thirty-three, form the council of the city, and have the sole management and disposal of the city revenues. Formerly the provost was also an officer in the Scottish parliament. The magistrates are sheriffs depute and justices of the peace; and the town council are patrons of all the churches of Edinburgh, patrons of the University, and electors of the city's representative in parliament. They have besides a very ample jurisdiction both civil and criminal, are superiors of the Canongate, Portsburgh, and Leith, and appoint over these certain of their own number, who are called baron bailies; but the person who presides over Leith has the title of admiral, because he has there a jurisdiction over maritime affairs. The baron bailies appoint one or two of the inhabitants of their respective districts to be their substitutes. These are called resident bailies, and hold courts in absence of the baron bailies, for petty offences, and discussing civil causes of small moment.

In a paper communicated by the Rev. Dr. Blair to Sir John Sinclair containing an enumeration of families and examinable persons in the parishes of the city, in 1722, the total number of families was taken at 5979, and of persons 20,336. Adding the usual proportion of one-fourth of the examinable persons for children, the number of inhabitants would amount to 25,420; and allowing 15,000 for the suburbs, the total would be 40,420 souls. Maitland, in his History of Edinburgh, computing from the register of burials, makes the total number within the nine parishes 48,000 in 1753. And that this was very near the truth, appears from the enumeration actually made at the request of the Rev. Dr. Webster, in 1755, when the total number was found to be 57,195. But, as in this number, the inhabitants of south and north Leith were included, amounting to 9405, the total number of souls in the city and its environs turns out exactly 47,790, which is within 210 of Maitland's computation, and shows it to have been founded on just principles. The population of Edinburgh had increased very much within twenty years following, for the computation made by the late Mr. Hugo Arnot, in 1775, was considerably greater. The number of families in Edinburgh, Leith, &c., is stated by him at 13,806: which multiplied by five, (supposed more just than by six), and adding 1400 for the castle, &c., the number of souls in the city and suburbs, including Leith, amounted, in 1775, to 70,630. An enumeration was made in 1791 for the statistical report of the city, which stated the total of inhabitants, including those of the suburbs and town of Leith, at 84,886. But the accuracy of this enumeration is much doubted; because the parliamentary enumeration of 1801 makes the number of inhabitants in Edinburgh and its suburbs, including Leith, only amount to 82,560. A similar enumeration took place in 1811, when the return was 102,987. The last was in 1821, when the return was as follows: number of families, 29,193; males 62,099, females 76,136; total 138,235.

The chief prison, or gaol, stands on the Calton Hill, and was erected about ten years ago. It is in the Saxon style of architecture, and is in length 194 feet by forty feet deep. It is divided into six classes of cells, four for men and two for women, besides a division containing cells for condemned criminals. Each of the classes has on the ground floor a day room with a fire-place, an open arcade for exercise in bad weather, and an airing ground supplied with water. The number of cells is fifty-eight, each being eight feet by six. In the centre of the building there is a chapel, and at the top there are four infirmary rooms for the sick. The house of the governor or captain of the gaol, as he is called, is placed upon an eminence which overlooks the prison. It is a picturesque building in the Gothic style, and contains, besides the governor's apartments, a committee room for the gaol-commissioners, a school for the instruction of juvenile delinquents, &c. The whole is surrounded by a wall about twenty feet high. There is also a prison called the Canongate Tolbooth, built in the reign of James VI., chiefly occupied as a debtors' prison. Besides this there are court-houses and prisons in the other suburbs of the city, but none of them worthy of particular notice. The old Tolbooth, which stood at the north-west corner of St. Giles's

church, has been immortalised by the author of the Waverley novels, under the title of the Heart of Mid-lothian. It was built in 1561, but, having become inadequate for modern purposes, it was pulled down in 1817. The great entrance door with its massive lock and ponderous key, and a considerable part of the circular tower in which it was placed, were, upon the demolition of the building, carefully removed to Abbotsford, the residence of Sir Walter Scott, where it has re-assumed its venerable appearance, and forms an entrance to that beautiful but singular structure. The old Tolbooth is said originally to have been occupied as a parliament house as well as a prison. The last Scottish parliament at which majesty in person attended, was held in this Tolbooth, immediately after the coronation of Charles I. in 1633.

The Bridewell establishment of Edinburgh, on the Calton Hill, said to be one of the best of the kind in Europe, was founded in 1791.

The Exchange is a large and elegant building, with piazzas on the north side, and a court of about ninety feet square in the middle but the merchants have never made use of it to meet in, still obstinately preferring the open street as formerly. The back part of the building is used for the city chambers and dependent offices for the different departments, to which the access is by a hanging stair sixty feet in height. The Scottish Mint is kept up according to the articles of the union, with all the offices belonging to it, though no money is ever struck here. It stands in the lane called Gray's Close, but is in a ruinous state, though still inhabited by several of the different officers, who have all free houses. The bell-man's office, however, is not a sinecure, for he regularly rings the bell. This place, as well as Holyrood House, is an asylum for debtors, but only for twenty-four hours. There are three banking companies in Edinburgh, established by statute, or by royal charters. These are the Bank of Scotland, commonly called the Old Bank; the Royal Bank of Scotland, and the British Linen Company. 1. The Bank of Scotland, commonly called the Old Bank, was erected by act of parliament A. D. 1695. By the statute of erection, the company was empowered to raise a joint stock of £1,200,000, afterwards increased to £1,500,000 sterling, for the purpose of carrying on a public bank. The smallest share any person could hold was declared to be £1000 Scots; and the largest sum for which any one was allowed to subscribe was £20,000 of the same money. £8,000 are declared to be the qualification necessary to entitle any one to be elected governor; and £3000 for each director. The management of the affairs of the company was vested in a governor, deputy-governor, and twenty-four directors; and, in choosing these managers, each proprietor was declared to have a vote for every £1000 of stock held by him. The office of this company prior to 1806 was kept down a narrow lane, at the south side of that part of the High Street called the Lawn-market; but they have since erected for their accommodation an elegant building to the northward of the High Street, in full view of Prince's Street. This bank has branches in every considerable town in Scotland. The original shares of this company, amounting to £83 6*s.* 8*d.*, sold in 1763 at £119; in 1791 at £180; and in 1827 at £187. 2. The Royal Bank was established in 1727. The stock of this company originally consisted of the equivalent money which was due to Scotland at the union. Proprietors of these sums to the extent of £111,000 were the original subscribers. But, this stock being found insufficient, a second charter was obtained in 1738, by which they were empowered to raise their stock to £150,000 sterling; and, subsequently, to £1,000,000. The business is managed by a governor, deputy-governor, directors, and extraordinary directors. The amount of the company's stock is at present £1,500,000 sterling; and each £100 of stock in the market sells for £170. The Royal Bank is situated in St. Andrew's Square, New Town. 3. The British Linen Company, with a capital of £100,000, was incorporated by royal charter in 1746, with a view to encourage the linen manufacture in Scotland. By the constitution of this company, its affairs are under the management of a governor, deputy-governor, and five directors. It carries on the business of banking, and promissory notes, like the two former companies; and the office is situated in St. Andrew's Square. The Commercial Bank was established in 1810, and the National Bank in 1825. These two last are upon the joint stock principle, and have a very numerous proprietary, and extensive capitals. The business of each is conducted like that of the other three old companies, by a board of directors. All these banks issue promissory notes for various sums not under £1 sterling, payable on demand in cash, or Bank of England notes. Two private Banking-houses also issue notes in the same way, viz. those of Sir William Forbes and Co., and Ramsay's, Bonars, and Co. But besides these there are several banking-houses of great reputation in Edinburgh, which do not issue small notes, but which carry on the other branches of the banking trade, by transmitting money, discounting bills, and accommodating individuals with cash accounts.

The Custom-house used to be at the back of the Royal Exchange; but some years ago the establishment removed to Bellevue House in the New Town, which forms the eastern termination of Great King Street. The board consists of one resident, and two assistant-commissioners, under whom are a secretary, and various other officers. Some recent arrangements incorporate them with the establishments at Leith. The Excise-office in St. Andrew's Square has been recently purchased by the Royal Bank, the Excise board occupying Bellevue House. There are three commissioners of excise, a secretary, and numerous officers.

The Post Office forms part of the splendid buildings in Waterloo Place, and stands to the east of the arch of the Regent Bridge. It has extensive accommodation for the business of this important public establishment. A century ago the revenue of the Post-office of Scotland was inadequate to defray the expense of keeping it up. In 1763, however, it had increased to £11,942 per annum. In 1783 it had reached upwards of £40,000; and now

(1827) it is £150,000. There are subordinate offices in different parts of the city.

The Edinburgh Register Office was suggested by the earl of Morton, lord register of Scotland. The earl, therefore, obtained from his majesty a grant of £12,000 out of the forfeited estates, for building a register-office, or house for keeping the records, and disposing them in proper order. The foundation was laid on the 27th of June, 1774. The building, which is one of the most beautiful of Mr. Adams's designs, was executed in a substantial manner, in about sixteen years, at the expense of nearly £40,000, and is one of the principal ornaments of the city. The lord register has the direction of the whole, and the principal clerks of session are his deputies. These have a great number of clerks under them, for carrying on the business of the court of session. The lord register is a minister of state in this country. He formerly collected the votes of the parliament of Scotland, and still collects those of the peers at the election of sixteen, to represent them in parliament.

The earliest institution of a grammar-school in Edinburgh seems to have been about 1516, and a building which had been erected for the accommodation of the scholars in 1578, continued, notwithstanding the great increase of their number, to be used for the purpose till 1777; when the foundation of the present High School was laid on the 24th of June, by Sir William Forbes. This building is plain, but commodious. The great hall, where the boys meet for prayers, is sixty-eight feet by thirty, with commodious libraries at each end. There are a rector and four masters, who teach about 700 scholars annually. The salaries are trifling, and the fees are 10s. 6*d*. per quarter, but five quarters are paid. There is also a janitor, who receives one shilling from each of the boys quarterly. To the scholars of prominent merit premiums are awarded annually, chiefly in books; and to the dux of the highest class a gold medal, with a suitable inscription. Edinburgh Academy is the name given to another school erected in 1824, to the north of the Royal Circus. This establishment is under the superintendence of a board of directors; and besides a rector and four masters for the Latin classes, as in the High School, has an English master, and teachers for writing and arithmetic. There are also several other public English schools, the masters of which have small salaries in addition to the fees; and numerous private estblishments, not only for teaching English, but the learned and foreign languages, on moderate terms; so that Edinburgh affords facilities for the acquisition of learning and the various ornamental accomplishments, which are hardly to be met with upon equal terms in any other city.

Edinburgh is not a mercantile or manufacturing town. The merchants, in the strict sense of the word, reside principally at the port of Leith, and the support of the city depends chiefly on the consumption of the necessaries and superfluities of life. Gentlemen of the law are a very numerous and respectable body here: country gentlemen, officers of the army and navy, travellers from all parts, and strangers whose object is either business or pleasure, &c. and numbers of respectable families, come to Edinburgh, as a settled residence, for a time, with a view to the education of their children. There are various manufactures of paper in the neighbourhood of Edinburgh, and printing is carried on very extensively. There is also an extensive type foundry; and within these few years the manufacture of silver plated goods, particularly of the elegant ornaments for coaches now so generally used, has been introduced and carried on to a considerable extent.

In order to contrast the different stages of metropolitan society with effect, it is not here necessary to go back to Mr. Creech's well known account of the changes which took place in Edinburgh from 1763 to 1793. It is thirty-five years since Mr. Creech wrote, and it is not going too far to say, that the changes and improvements which have taken place in this last period infinitely surpass all that preceded them, and would require even a better pen than his adequately to describe them. Our limits do not permit of minute detail in matters of this kind, otherwise we could contrast and comment on individual improvements as he has done. We may remark, however, that since 1793, Edinburgh has extended to twice the size it was at that time, and has nearly doubled its population. The public undertakings to improve and adorn it, would require a volume to detail them with effect. In science, literature, and the arts, its progress has been equally extensive and remarkable. Wealth and luxury have increased in a like ratio, and the houses in some of the squares and streets, then occupied by persons of rank, fashion, and opulence, are now converted into shops or places of business for the trading part of the community. With regard to equipages, servants, and modes of living, the change is perhaps as striking as that which occurred within the period of Mr. Creech's experience; but the difference of manners and of tastes is no where so conspicuous, as in the elegance and refinement displayed in the numerous country villas, within a short distance of the city, occupied, during the summer months, by the different classes of citizens. In morals too, if we are to judge from the general regard paid to public opinion, and from the outward observance of all the decencies of life, by persons of every rank, there has for some years been a progressive improvement; and, when compared with the morals of 1793, those of the present day, we confess, compel us, in spite of ourselves and of all our early predilections, to award them the preference and the palm of approbation. Perhaps the prevailing fault of Edinburgh society at present is the rage which even persons of moderate circumstances exhibit for show and splendor in their domestic establishments. According to this foible of the time, nobody is entitled to move in good society without a fine house, fine furniture, fine servants, and every day at his table an absurd and ostentatious display of fine wines. If this be an evil to society at large, it fortunately often cures itself by the ruin which it brings down on the heads of those who weakly and inconsiderately indulge in it.

The *University* of Edinburgh is a sufficiently

prominent feature in its history and character to deserve our distinct notice. In 1581 a grant was obtained from James VI. for founding a college within the city of Edinburgh; and the citizens, aided by various donations, purchased part of the areas, chambers, and church of the collegiate provostry and prebends of the Kirk-a-field, otherwise called Templum et Præfectura Sanctæ Mariæ in campis, as a suitable site for it. In 1583 the provost, magistrates, and council, the patrons of his new institution, prepared the place for the reception of teachers and students; and in October, 1583, Robert Rollock, whom they had invited from a professorship in the University of St. Andrew's, began to teach in it. Other professors were soon after elected; and Rollock was made principal of the College, and professor of divinity. The offices of principal and professor of divinity remained united till 1620. In 1617 James VI. having visited Scotland, commanded the principal and regents to attend him at Stirling Castle, where they held a solemn philosophical disputation, and the king desired that their college should for the future be called The College of King James, which name it still bears in all its diplomas and public deeds. For some time the college consisted only of the principal and four regents or professors of philosophy, who each instructed one class of students for four years, in Latin, Greek, logic, mathematics, ethics, and physics. It was not till about the year 1710 that the regents began to be confined each to a particular profession; since which time they have been commonly styled Professors of Greek, Logic, Moral Philosophy, and Natural Philosophy.—The first medical professors instituted at Edinburgh, were Sir Robert Sibbald and Dr. Archibald Pitcairn, in 1685. For thirty years afterwards, however, a summer lecture, on the officinal plants, and the dissection of a human body, once in two or three years, completed the whole course of medical education in Edinburgh. In 1720 an attempt was made to teach the different branches of physic regularly; which succeeded so well, that, ever since, the reputation of the University as a school for medicine has been undisputed. The College has a fine library, founded in 1580, by Mr. Clement Little, advocate. It is enriched by a copy of every book entered in Stationers' Hall, according to statute, and it now contains 70,000 volumes. The students of divinity, who pay nothing to this library, have one belonging to their own particular department. The museum contains a capital collection of natural curiosities, the number of which is daily increasing; and, under the admirable management of professor Jamieson, it promises to become the most interesting and important in Britain. The anatomical and obstetrical preparations are peculiarly valuable. This university having been instituted after the Reformation, among a frugal people that had no love for ecclesiastical dignities, it differs greatly from the wealthy foundations which receive the name of Universities and Colleges in England, or in the Catholic countries of the continent of Europe. It still consists of a single college, which enjoys the privilege of conferring degrees.

The branches of education at present taught in it are the following: 1. *Literature and Philosophy*, comprehending humanity, or Latin, Greek, mathematics, logic, moral philosophy, natural philosophy, rhetoric, belles lettres, universal history, and natural history. 2. *Theology*, comprehending divinity, church history, and oriental languages. 3. *Law*, comprehending civil law, institutes and pandects, Scots' law, public law, conveyancing. 4. *Medicine*, comprehending dietetics, materia medica, and pharmacy; practice of physic, chemistry, and chemical pharmacy; theory of physic, anatomy, and surgery; theory and practice of midwifery; medical jurisprudence, clinical medicine, clinical surgery, and military surgery. During the Summer session lectures are given on the following branches, viz. botany, natural history, midwifery, clinical lectures on medicine, and clinical lectures on surgery. The principal professors and lecturers are at present thirty-one in all; and the number of students is about 2400. The professorships of church history, natural history, astronomy, law of nature and nations, and rhetoric, are in the gift of the crown. The professor of agriculture was nominated by Sir William Pulteney, the founder of the institution. The remaining chairs are in the gift of the town council. Besides the classes here enumerated, the medical professors alternately give clinical lectures upon the cases of the patients in the Royal Infirmary. The integrity and discernment uniformly displayed in the appointment to professorships in this university, have contributed greatly to extend its reputation both at home and abroad. From confidence in the talents and industry of the professors, it has become a seat of education, not only to the youth of the united kingdom, but, to the honor of our country, students have been attracted to it from every nation in Europe, and from almost every civilised country on the globe. About thirty years ago, the old buildings of the college being thought quite unsuitable to the dignity of such a flourishing seat of learning, the magistrates and council set on foot a subscription for erecting a new structure, according to a design of Robert Adam, Esq., architect. Most of the old fabric was in consequence pulled down, and the new building is now in considerable forwardness. It is upon a superb scale, and the whole, when finished, if not the most splendid structure of the sort in Europe, will be the completest and most commodious. The estimate for completing the whole was about £63,000. The six columns in the front are not to be equalled in Britain. The shaft of each is twenty-three feet high, and three feet diameter, of one entire stone. The botanical garden belonging to the university is situated to the northward of the village of Canon-mills, and consists of about twelve acres. But the funds for the support of this garden are very inadequate to the purpose, not exceeding £170 per annum.

EDINBURGHSHIRE, or MID-LOTHIAN. See MID-LOTHIAN.

EDIT, *v. a.* } Old Fr. *editer*; Lat. *edo, edere*, to set forth. To publish; and hence to prepare a work for publication.
EDI'TION, *n. s.*
ED'ITOR, *n. s.*
EDITO'RIAL, *adj.*

It is now particularly applied in our language, to the duty of superintendence and correction, in distinction from the original composition of a book.

These are of the second *edition*. *Shakspeare.*

The business of our redemption is to rub over the defaced copy of the creation, to reprint God's image upon the soul, and to set forth nature in a second and a fairer *edition*. *South.*

I cannot go so far as he who published the last *edition* of him. *Dryden's Fables, Preface.*

The Code, composed hastily was forced to undergo an emendation, and to come forth in a second *edition*. *Baker.*

This English *edition* is not so properly a translation, as a new composition upon the same ground. *Burnet.*

When a different reading gives us a different sense, or a new elegance in an author, the *editor* does very well in taking notice of it. *Addison's Spectator.*

This nonsense got into all the *editions* by a mistake of the stage *editors*. *Pope's Notes on Shakspeare.*

Here you see the two strongest inducements are held forth;—first, that nobody ought to read it; and, secondly, that every body buys it: on the strength of which the publisher boldly prints the tenth *edition*, before he has sold ten of the first. *Sheridan.*

I sent it in a letter to the *editor*,
Who thanked me duly by return of post—
I'm for a handsome article his creditor.
Byron.

EDMONDSON (Joseph), a genealogist and herald painter, was appointed in 1764, Mowbray herald extraordinary. He was also a member of the Society of Antiquaries. He died in 1786. His works are, Historical Account of the Greville family, 8vo.; A Companion to the Peerage, 6vo.; A Body of Heraldry, 2 vols. folio; Baronagium Genealogicum, or the Pedigrees of English Peers, 6 vols. folio.

EDMUND I, king of England, the son of Edward the Elder, succeeded his brother Athelstan A. D. 941, and exhibited proofs of great courage and abilities during a short reign of about eight years. He was murdered by Leolf, a robber, A. D. 948. See ENGLAND.

EDMUND II, surnamed Ironside, from his strength and valor, succeeded his father Ethelred II. A. D. 1016, in that part of England which was not then possessed by the Danes. He was endued with great abilities, but was murdered by the traitor, Edric, duke of Mercia, before he had reigned a year. See ENGLAND.

EDOM, Heb. אדום, i. e. red; or Esau, the son of Isaac and brother of Jacob. The name Edom was given him, either because he sold his birth-right to Jacob for a mess of red pottage, or by reason of the color of his hair and complexion. Idumæa is derived from Edom, and is often called in Scripture the land of Edom. See the next article.

EDOM, or Idumæa, in ancient geography, a district of Arabia Petræa. A great part of the south of Judæa was also called Idumæa, because occupied by the Idumæans, upon the Jewish captivity. But Edom Proper appears not to have been very extensive, from the march of the Israelites, in which they compassed it on the south eastwards, till they came to the country of the Moabites. Within this compass lies mount Hor, where Aaron died; marching from which the Israelites fought with king Arad the Canaanite, who came down the wilderness against them. And this is the extent of the Idumæa Propria, lying south of the Dead Sea; but in Solomon's time extending to the Red Sea.—1 Kings ix. 26.

EDRISSI (Mohamed ben Mohamed, Scherif al) an Arabian prince and geographer of the twelfth century, who, being expelled from his dominions in the south of Egypt, took refuge in Sicily, at the court of Roger II. Here he composed Geographical Recreations; and constructed a silver globe, said to have weighed 400 Greek pounds, on which were inscribed the divisions of the earth, so far as they were then known. His book, which has been termed Geographia Nubiensis, from its containing much information relative to the eastern parts of Africa, was translated into Latin by Gabriel Sionita and John Hesronita, and published at Paris, 4to, 1619.

EDUCATION.

ED'UCATE, *v. a.* } Lat. *educare*, from *duco*, to lead. To bring up from youth; instruct youth. See Hooker's fine definition of the substantive.
EDUCA'TION, *n. s.*

Education and instruction are the means, the one by use, the other by precept, to make our natural faculty of reason both the better and the sooner to judge rightly between truth and error, good and evil. *Hooker.*

The best time for marriage will be towards thirty, or as the younger times are unfit, either to choose or to govern a wife and family, so, if thou stay long, thou shalt hardly see the *education* of thy children, who, being left to strangers, are in effect lost; and better were it to be unborn than ill-bred. *Raleigh to his Son.*

Diversity of *education*, and discrepancy of those principles wherewith men are at first imbued, and wherein all our after reasonings are founded. *Lord Digby to K. Digby.*

If the children of religious parents, after all Christian nurture, shall shame their *education*, God takes it more heinously, and revenges it more sharply. *Bp. Hall. Contemplation.*

Their young succession all their cares employ;
They breed, they brood, instruct and *educate*,
And make provision for the future state.
Dryden. Virgil.

Some independent ideas, of no alliance to one another, are, by *education*, custom, and the constant din of their party, so coupled in their minds, that they always appear there together. *Locke.*

What *education* did at first conceive,
Our ripened age confirms us to believe.
Pomfret.

Education is worse, in proportion to the grandeur of the parents: if the whole world were under one monarch, the heir of that monarch would be the worst *educated* mortal since the creation.
Swift. On Modern Education.

Education at our public schools and universities is travelling in a waggon for expedition, where there is a bridle road that will take you by a short cut to Parnassus, and the polisher has got the key of it.
Cumberland.

Lively and sensible, and having received an *education* somewhat above her rank, her conversation was very agreeable. Ralph read plays to her every evening.
Franklin.

True, and then as to her manner; upon my word I think it is particularly graceful, considering she never had the least *education*: for you know her mother was a Welsh milliner, and her father a sugar baker at Bristol.
Sheridan.

EDUCATION. We have explained this term verbally. A more ample and satisfactory definition has been given thus: 'Education is that series of means, by which the human understanding is gradually enlightened, and the dispositions of the human heart are formed and called forth, between early infancy and the period when a young person is considered as qualified to take a part in active life.'

The word education, among the ancients, seems to have had a signification different from that which is affixed to it by the moderns. Educit obstetrix, says Varro, educat nutrix, instituit pædagogus, docet magister. According to this distinction, education, institution, and instruction, are as different as the midwife, the nurse, the preceptor, and the master. But other writers, both ancient and modern, have considered education in the comprehensive sense expressed in the above definition; and as no subject is of more importance than this, it being the practical foundation of all mental acquirements, as well as of all virtue, many distinguished authors have devoted their minds to the consideration of it. Lycurgus, and others of the most eminent legislators of antiquity, considered a proper education as so necessary to form good citizens, that they incorporated their systems of education with the codes of laws they gave to their countrymen. But among all the legislators and authors of antiquity, of whose works any relics have come down to us, none appears to have written with more propriety on this subject, than the celebrated Quintilian, who taught rhetoric in Rome under Domitian, Nerva, and Trajan.

Among the moderns, the sublime Milton, and the judicious Locke, have left treatises on this important topic. The late lord Kames too was the author of an excellent tract, entitled Loose Hints on Education; and the fanciful Rousseau, whose genius and eccentricities are well known to the public, devoted his Emilius to the consideration of this subject. To these a host of respectable modern names might be added. But we do not consider a Dictionary of science as the proper depository for extensive speculations of this kind. Our whole work, indeed, is a course of elementary, and therefore educational treatises; what is more must be either purely speculative; or it must involve, details which are varied with the designs of every parent, and the talents, station in life, and destiny of every young person. It will suffice, therefore, here briefly to review the principal ancient and modern systems of education, adding a more particular account of one or two modern and material improvements.

The system of Lycurgus, however well adapted to a state just emerging from barbarism, was but a species of detached military training; designed to form the heroic at the expense of all the other virtues, and extinguishing all regard to the interest of other states as well as family and personal interests, in an exclusive spirit of supposed patriotism. For, in reality, his system was too confined to be truly patriotic. It had no tendency to elevate the human intellect, or to stimulate into activity many of the noblest and best affections of our nature. Had his institutions been preserved in their pristine vigor, the Spartans might have continued precisely the same; but they would have been incapable of receiving the knowledge of those arts which adorn and improve mankind. The system, indeed, of a state education has always been too cumbrous for management; it has the appearance at the best of endeavouring to mould all minds into one form, and, by having a strong tendency to produce habitual submission to the will of one, of being highly unfavorable to public liberty. No doubt can exist which is to be preferred, the total neglect of education, or this artificial and forced method of attempting it; but all that the state has legitimately to do is, to take care that none shall be without the means of instruction, and to leave private persons to follow the bent of their own inclinations in the employment of them. In those nations which were first civilised, the power of the parent was considered as absolute; and as implicit submission was, from the first, inculcated upon the young, the labor of education was greatly diminished, and the limited knowledge and sentiments of the parent were very easily communicated to youth. The round of duty was less extensive, and its parts less complicated than at present. Among the Israelites, where moral education appears to have made the greatest advances, the system of duty was completely laid down in the written law; so that all the knowledge which the age and country possessed was certainly to be gained, and the moral principles certainly to be regulated aright, where the parent employed wisely that authority which the law enforced, and which the customs of the times would otherwise have allowed.

The necessity of a tolerably correct direction of the early propensities, in order to promote domestic comfort, must in a great number of cases have led to such direction of them, without any view to the future advantage of the individual. But with respect to those who were to come forwards in the employments of the state, or in any other way to be exposed to the notice of their countrymen, the advantages of early instruction in knowledge, and of the early cultivation of those qualities which the wants of the age and

country made of great estimation, were so obvious, that they appear to have led, in a variety of cases, to great attention to the work of education; and though we have not, in many instances, any account of the procedures of the ancients, yet, in the few circumstances which have been recorded, we perceive that, long before any thing like a systematic plan of education was adopted, individuals made education an object of primary concern.

One grand object of moral education, so far as it respects rectitude of dispositions and affections, is to cultivate the habit of self-control. Religious people, of all periods, who have possessed the light of revelation, have, in a particular manner, been sensible that this habit lies at the foundation of moral worth; and where the authority of the parent is generally preserved, the cultivation of this habit follows as a matter of course. It requires a wise choice of means to prevent filial submission from being the submission of a slave, rather than of a child: but where it is acquired, and rightly directed, the foundation is laid for submission and obedience to the will of God; and, where *this principle* takes a firm hold on the mind, almost every thing is done that could be wished, to further the progress of the individual towards moral worth. A maxim of the highest authority, now indeed, is felt in all its truth, 'The fear of the Lord is the beginning of wisdom.' In reading almost the only systematic work of antiquity on the subject of education, that of Quintilian, we become convinced of the writer's great good sense, excellence of disposition, and extensive information; and from his work, though it had a particular object in view, much may be learned by the modern instructor. Most excellent principles are scattered up and down in those general parts, which amply repay our perusal, though we are seldom invited to proceed by elegance of diction, or brilliance of thought: and the different facts he mentions, give us reason to suppose that, in his time, education was in a most degraded state at Rome.

Among the moderns few names are more justly venerated than that of John Milton. His life was devoted to study; and part of it was employed in instructing youth. Among his other works we find a Treatise on Education. He had himself been educated according to the plan long established in the English universities. The object of his directions is to exhibit a plan of 'a better education, in extent and comprehension far more large, and yet of time far shorter, and of attainment far more certain, than any that had yet been in practice.' The following is the substance of his treatise:—'The end of learning is to cultivate our understandings, and to rectify our dispositions, by enriching our minds with the treasures of wisdom. But, in the present modes of education, this design does not appear to be kept in view. The learner of Latin is burdened with rules, themes, verses, and orations; but no care is taken to make him master of the valuable knowledge which the classics contain. And, when he advances farther, he is driven into the thorny paths of logic and metaphysics. So, when his studies are completed, he is almost as destitute of real knowledge as when he first entered a school.' To render learning truly beneficial, instead of the school and university education which youth at present receive, Milton proposes that the place of both school and university be supplied by an academy, in which they may acquire all that is taught at either, except law and physic.

'Let the academy,' he says, 'afford accommodation for 150 persons; twenty of whom may be servants and attendants. As many academies as are necessary may be afterwards erected on the model of this one. Let the youth who are introduced into this academy begin with learning the principal rules of grammar. In their pronunciation of Latin, let them follow that of the Italians, as that of the English is indistinct, and unsuitable to the genius of the language. Next read to them some entertaining book on education, such as the three first books of Quintilian, in Latin; and Cebes, Plutarch, or some other of the Socratic discourses, in Greek; and inspire them, by seasonable lectures, with love for learning, admiration of great and virtuous characters, and a disposition to cheerful obedience. At a different hour let them be instructed in arithmetic and geometry. Between supper and bed time instruct them in the principles of religion and the sacred history. From the writers on education, let the pupils pass to the authors on agriculture, to Cato, Varro, and Columella. Before half these authors be read, they cannot but be pretty well qualified to read most of the Latin prose authors. They may now learn the use of the globes, and make themselves acquainted with the ancient and modern maps. Let them about this time, begin the study of the Greek tongue, and proceed in it as in the Latin: they will not fail to overcome, in a short time, all the difficulties of grammar; after which they will have access to all the treasures of natural knowledge to be found in Aristotle and Theophrastus. In the same manner they may make themselves acquainted with Vitruvius, Seneca, Mela, Celsus, Pliny, and Solinus. Let them next turn their attention to mathematics, beginning with trigonometry, as an introduction to fortification, architecture, and navigation. To teach them the knowledge of nature, and the arts of life, let them have the instructions of artists and mechanics, whose skill has been obtained by actual practice. They will now read the poets with ease and pleasure. From these let them proceed to the moralists; after which they may be allowed the best Greek, Latin, and Italian dramatic compositions. From these let them proceed to politics: let them here study the law of Moses, the admirable remains of the ancient lawgivers of Greece, the Roman tables, edicts, and pandects, concluding with the institutions of their mother country. Let them next be more particularly instructed in the principles of theology; having by this time acquired the Hebrew language, together with the Chaldee and the Syriac dialect, whereby they may read the Scriptures in their original tongue. Thus furnished, they will be able to enter into the spirit of the noblest historians and poets. To get by heart, and repeat in a proper manner, passages from the writ-

ings of some of these, will have the happiest effects in elevating their genius. Let this stately edifice be crowned with logic and rhetoric. This would unite the advantages of an Athenian and a Spartan education: for the pupils should be taught the exercises of wrestling and fencing, and the whole military discipline.' Such are the sentiments of our admired poet on education—a plan to be expected from one who was an enthusiastic admirer of the sciences, arts, and institutions of Greece and Rome; and who, at the same time, from his religious and political principles, was no friend to the universities.

The name of Locke is almost equally calculated to excite the attention of every reader. He was capable of thinking for himself; but, unlike Rousseau, more desirous of rendering himself useful, than of being admired for singularity: he had examined without prejudice the effects of those modes of education of which he disapproves. To render himself useful to mankind, he could descend from the heights of science to the humble task of translating Æsop's Fables.

Mr. Locke, in his Treatise on Education, proposes the two great objects, of preserving and strengthening the bodily constitution; and informing the understanding with useful knowledge, while we cherish good dispositions in the heart. In his directions on the first of these heads, he recommends plain fare, simple and light clothing, with abstinence from strong liquors, and as much as possible from medicine, together with temperance and early rising. In one thing, however, few parents will be willing to comply with Mr. Locke's advice. He not only directs that children's feet be frequently bathed in cold water; but even wishes that their shoes were always kept in such a condition as to admit water freely. This he thinks likely to fortify the constitution in such a manner, as to render them less liable, in the course of life, to such diseases as arise from any unusual exposure to wet or cold. Whatever may be thought of his advice, his method of cultivating the understanding, and forming the dispositions, deservedly claims the attention of parents and preceptors. With a virtuous indignation he reprobates that folly by which we generally corrupt the heart and spoil the temper of children, in infancy; so as to render them incorrigible as they advance in life. On the other hand he reckons it neither necessary nor prudent to treat them with harshness or severity. Let them be formed to obedience from their earliest years: let them be accustomed to submit implicitly to the direction of those on whom they depend. But beware of souring their tempers, and depressing their spirits by harshness; as well as of accustoming them to neglect their duty, except when allured to it by the hopes of reward. Inspire them with a sense of shame, and with a generous thirst for praise. Caress and honor them when they do well; treat them with neglect when they act amiss. This will produce much better effects than if you were at one time to chide and beat them; at another, to reward them with a profusion of foolish indulgencies.

Mr. Locke does not approve of forming children at too early an age, to that politeness and propriety of manners which should distinguish them when they become men. This great man was of opinion that a private education is more favorable than a public one to virtue, and scarcely less favorable to learning. He advises us more particularly to keep our pupil at a distance from evil example; to choose the most favourable seasons for instruction; to enforce obedience strictly, but rarely by blows. If his engagements in life prevent the parent from superintending and directing his son's education personally, let him commit him to the care of a virtuous and judicious tutor, who is rather a man of experience in the world than of profound learning; for it is more necessary that the pupil be formed for conducting himself with prudence in the world, and be fortified against those temptations to which he will be exposed in active life, than that his head be stuffed with Latin and logic. Mr. Locke, although his own mind was stored with Grecian and Roman literature, is against that application to ancient learning, which was then indispensably required in the education of youth. He considers languages and philosophy as rather having a tendency to render the youth unfit for acting a prudent and becoming part in life, than forming him for it; and he therefore insists that these should be but in a subordinate degree the objects of his attention.

Curiosity, he thinks, ought to be industriously roused in the breast of the child, and cherished by meeting the readiest gratification. He should be indulged in play, while he continues to play with keenness and activity; but not suffered to loiter about in indolence. To restrain him from fool-hardy courage, point out to him the dangers to which it exposes him: to raise him above timorous cowardice, and inspire him with manly fortitude, accustom him from the earliest period of life to an acquaintance with such things as he is most likely to be afraid of: subject him now and then to pain, and expose him to danger; but let such trials be judiciously conducted. When, from idleness or curiosity, children treat dogs, cats, birds, butterflies, &c., with cruelty, Mr. Locke advises that they be carefully watched, and every means used to excite them to generous sensibility. Allow them to keep tame birds, dogs, &c., only on condition of their using them with tenderness. He supposes that this unhappy disposition to cruelty is occasioned, or fostered, by people's laughing when they behold the impotent efforts of children to do mischief; and encouraging them in maltreating those creatures which are within their reach. He censures the practice too of entertaining them with stories of fighting and battles; and representing characters distinguished for atrocious acts of inhumanity as great and illustrious. Let such practices be refrained from, if you wish to inspire your child with generous and humane sentiments. Teach him gentleness and tenderness, not only to brutes but also to servants and companions. The enquiries of a child ought to be answered readily, that great man insists, though his questions be put in aukward language. Curiosity is natural, and, if not repressed, he will often be excited by it to the pursuit of knowledge. Let him find

his eagerness in this pursuit a source of applause and esteem. Avoid the folly of those who sport with the credulity of children, by answering their questions in a ludicrous or deceitful manner. When he attempts to reason on such subjects as are offered to his observation, be careful to encourage him: praise him if he reasons with any degree of plausibility; even if he blunders, beware of laughing at him. With regard to amusements; while you indulge him freely in innocent diversions, encourage him to exercise his own ingenuity in constructing them for himself. In virtue, wisdom, breeding, and learning, he comprehends all that is necessary to enable his pupil to act a respectable part in life. In forming a boy to virtue, he advises first to inform him of the relation subsisting between human creatures and a supreme independent Being, and to teach him, that obedience and worship are due to that Being, but beware of impressing his mind with any notions concerning spirits or goblins, which may render him incapable of bearing darkness or solitude. Next labor to impress his mind with a veneration for truth; habituate him to a strict adherence to it; and endeavour to render him gentle and good-natured.

Good breeding forms no inconsiderable part of a good education. In teaching this, Mr. Locke advises, 1st, To inspire a youth with a disposition to oblige all with whom he is conversant; next, to teach him how to express that disposition in a becoming manner. Let boisterous roughness, contempt of others, censoriousness, impertinent raillery, and a spirit of contradiction, be banished from his temper and behaviour. But beware of leading him to regard the mere forms of intercourse as matters of the highest importance. Teach him that genuine good breeding is only an easy and graceful way of expressing good sense and benevolence in his conversation and deportment.

Mr. Locke advises to initiate the child in reading, as an amusement, without letting him know that he is engaged about a matter of any importance: or teach him to consider it as a high honor to be permitted to learn his alphabet; otherwise he will turn from it with disgust. Such books only as are plain, entertaining, and instructive, should at this time be put into his hands. Mr. Locke disapproves of an indiscriminate perusal of the Bible at this period of life; but reckons it highly proper, to cause him to peruse some of its beautiful historical passages, with its elegant and simple moral precepts. He advises next to proceed with writing, and drawing, if the boy be not naturally incapable of acquiring the latter.

The scholar must now begin an acquaintance with other languages. Yet, says Mr. Locke, let none waste their time in attempting to acquire a knowledge of Latin, but such as are designed for some of the learned professions, or for the life of a gentleman without a profession. To these last it may be useful; to others this writer thinks it is wholly unserviceable. But in learning the Latin tongue, he proposes, as a much happier method than burdening and perplexing a boy with rules of grammar, to make him speak it with a tutor sufficiently master of it for that purpose. He proposes, that if we cannot conveniently have the boy taught Latin by conversation, the introductory books should be accompanied with an English version, to which he may have recourse, for the explanation of the Latin. And he again prohibits perplexing him with grammatical difficulties, as at his age, it is impossible to enter into the spirit of these things.

Skill in grammar, says Mr. Locke, may be useful to those whose lives are to be dedicated to the study of the dead languages: and that knowledge, which the gentleman and the man of the world may have occasion to derive from the ancient languages, may be acquired without a painful study of prosody or syntax. As the learning of any language is merely learning words; if possible, let it be accompanied with the acquisition of some real knowledge of things; such as the nature of plants, animals, &c. He insists that the boy be not burdened and tormented with the composition of Latin themes and verses. Neither let his memory be oppressed with whole pages and chapters from the classics. Such ridiculous exercises have no tendency, whatever prejudice may urge to the contrary, to improve him either in the knowledge of languages or of nature.

Mr. Locke, however, wishes that the French language were learned along with the Latin; and these to be accompanied with the study of arithmetic, geography, history, and chronology. Let these branches of knowledge be communicated to the learner in one of the two languages; and he will thus, he thinks, acquire the language with greater facility. We fear, however, the difficulty of acquiring these sciences, particularly the two first, would thus be proportionably increased. One method which Mr. Locke recommends for facilitating the study of language is, to put into the youth's hand, as soon as he has acquired a tolerable knowledge of chronology, some of the most entertaining Latin historians: the interesting nature of the events which they relate will not fail to command his attention, in spite of the difficulty which he must find in making out their meaning. The Bible and Cicero de Officiis will be his best guides in the study of ethics. The law of nature and nations, as well as the civil and political institutions of his country, he also recommends as important objects, which he ought to study with the most careful attention. Rhetoric and logic, with all their rules and terms, will contribute little to render him an acute reasoner or an eloquent speaker. Cicero and Chillingworth will be more beneficial in teaching him to reason and to persuade, than all the treatises on those arts which he can peruse, or all the lectures which he can hear.

In every art and science, Mr. Locke prefers practice and experience to rules. Natural philosophy, as contributing to inspire the breast with warmer sentiments of devotion, and serving many useful purposes in life, ought to make a part in the young gentleman's studies. But he prefers the humble experimental writers on that subject to the lofty builders of systems. Mr. Locke does not think Greek necessary for a gentleman or man of the world!

He recommends dancing, as contributing to ease and gracefulness of carriage; with riding and fencing, as necessary branches of a young gentleman's education. He also advises that he should learn some mechanical trade, with the exercise of which he may agreeably fill up some of his leisure hours: and insists that he should by no means be unskilled in the management of accounts. Travelling, he thinks, will do more hurt than good to the understanding and morals of the traveller, unless deferred to a later period, than that at which young gentlemen are usually sent out.

Dr. Watts subjoins a Discourse on the Education of Children and Youth, to his excellent Treatise on the Improvement of the Mind. It treats of, 1. Instructing children in religion, which he thinks should be attempted 'as soon as they begin to know almost any thing:' 2. The improvement of their natural powers: 3. Self-government, which he proposes children to be early instructed in: 4. Reading and writing: 5. An employment: 6. Rules of prudence: 7. Accomplishments in life; among which are enumerated the Greek, Latin, and French languages, logic, mathematics, arithmetic, algebra, geography, astronomy, natural philosophy, history, poesy, music, drawing, fencing, riding, and dancing; in which last accomplishment the Dr. 'confesses he sees no evil,' though he thinks 'mixed dancing has most sensible dangers,' over which 'a wise parent will keep a watchful eye upon the child.' 8. Of evil influences, from terrifying stories, bloody histories, &c. 9. Of sports and diversions. 10 and 11, His two last sections, treat of the proper degrees of liberty and restraint in sons and danghters. Dr. Johnson has said, 'Whoever has the care of instructing others may be charged with deficiency in his duty if this book is not recommended.'

In 1762 the celebrated John James Rousseau surprised the public with his Emilius; a moral romance in 4 vols. 12mo. We quote, with very little alteration, the character given of it, by Mr. Heron, in the Encyclopædia Britannica.

'For originality of thought, affecting sentiment, enchanting description, and bold vehement eloquence, this book,' observes this writer, 'is one of the noblest pieces of composition, not only in the French language, but even in the whole compass of ancient and modern literature. The irregularity of his method, however, renders it a very difficult task to give an abridged view of his work. He conducts his pupil, indeed, from infancy to manhood. But instead of being barely a system of education, his work is besides a treasure of moral and philosophical knowledge. He has chosen a path, and follows it from the bottom to the summit of the hill: yet whenever a flower appears, on the right or left hand, he eagerly steps aside to pluck it; and sometimes, when he has once stepped aside, a new object catches his eye and seduces him still farther. Still, however, he returns. His observations are in many places loosely thrown together, and many things are introduced, the want of which would by no means have injured either the unity or the regularity of his work. If we attempt to review the principles on which he proceeds, in reprobating the prevalent modes of education, and pointing out a new course, his primary and leading one seems to be, that we ought to watch and second the designs of nature, without anticipating her. As the tree blossoms, the flowers blow, and the fruit ripens each at a certain period; so there is a time fixed in the order of nature for the sensitive, another for the intellectual, and another for the moral powers of man to display themselves. We in vain attemp to teach children to reason concerning truth and falsehood, concerning right and wrong, before the proper period arrive: we only confound their notions of things, and load their memories with words without meaning; and thus prevent both their reasoning and moral powers from attaining that strength and acuteness of which they are naturally capable. He attempts to trace the progress of nature, and to mark in what manner she gradually raises the human mind to the full use of all its faculties. Upon the observations which he has made, in tracing the gradual progress of the powers of the human mind towards maturity, his system is founded.

'As it is impossible to communicate to the blind any just ideas of colors, or to the deaf of sounds; so it must be acknowledged, that we cannot possibly communicate to children ideas which they have not faculties to comprehend. If they are, for a certain period of life, merely sensitive animals, it must be folly to treat them during that period as rational and moral beings. But is it a truth that they are, during any part of life, guided solely by instinct, and capable only of sensation? Or, how long is the duration of that period? Has nature unkindly left them to be, till the age of twelve, the prey of appetite and passion? So far are the facts of which we have had occasion to take notice, concerning the history of infancy and childhood, from leading to such a conclusion, that to us it appears undeniable that children begin to reason very soon after their entrance into life. When the material world first opens on their senses, they are ignorant of the qualities and relations of surrounding objects: they know not, for instance, whether the candle which they look at be near or at a distance; whether the fire with which they are agreeably warmed may also affect them with a painful sensation. But they remain not long in this state of absolute ignorance. They soon appear to have acquired some ideas of the qualities and relative situation of bodies. They cannot, however, acquire such ideas, without exerting their reasoning powers in a certain degree. Appearances must be compared, and inferences drawn, before knowledge can be gained. It is not sensation alone which informs us of the relative distances of bodies; nor can sensation alone teach us, that the same effects which we have formerly observed will be again produced by the same cause.

'But, if children appear capable of reasoning at a very early period, they appear also to be at a very early period subject to the influence of the passions: they are angry or pleased, merry or sad, friends or enemies, even while they hang at the breast; instead of being selfish, they are naturally liberal and social. And, if we observe

them with attention, we shall find that the passions do not display themselves sooner than the moral sense. As it is wisely ordered, that we should not see, and hear, and feel, without being able to compare and draw inferences from our perceptions; so it is a no less certain and evident law of nature, that the passions no sooner begin to agitate the human breast, than we become able, in a certain degree, to distinguish the beauty and the deformity of virtue and vice. The child is not only capable of gratitude and attachment to the person who treats him with kindness; he is also capable of distinguishing between gratitude and ingratitude, and of viewing each with proper sentiments. He cries when you refuse to gratify his desires; but he boldly insists that he is injured when you use him cruelly or unjustly. It is indeed impossible to attend to the conduct of children during infancy, without being convinced that they are, even then, capable of moral distinctions. So little are they acquainted with artificial language, that we and they do not then well understand each other. But view their actions; consider those signs by which nature has taught them to express themselves. Our limbs, our features, and our senses, are not gradually and by piecemeal bestowed as we advance towards maturity; the infant body comes not into the world mutilated or defective: why then, in point of mental abilities, should we be for a while brutes, without becoming rational and moral beings till the fulness of time be accomplished? all the differences between the phenomena of manhood and those of infancy and childhood may be accounted for, if we only reflect, that, when children come into the world, they are totally unacquainted with all the objects around them; with the appearances of nature, and the institutions of society; that they are sent into the world in a feeble state, in order that the helplessness occasioned by their ignorance may attract the notice and gain the assistance of those who are able to help them; and that they attain not full strength in the powers either of mind or body, nor a sufficient acquaintance with nature, with artificial language, and with the arts and institutions of society, till they arrive at manhood.

'Even Rousseau, notwithstanding the art with which he lays down his system, cannot avoid acknowledging indirectly, on several occasions, that our social dispositions, our rational and our moral powers, display themselves at an earlier period, than that at which he wishes us to begin the cultivation of them.

'But though the great outlines of his system be merely theory, unsupported by facts, nay plainly contradictory to facts, yet his observations on the impropriety or absurdity of the prevalent modes of education are very often just, and many of the particular directions which he gives for the conducting of education are judicious. He is often fanciful, and often deviates from the common road, only to show that he is able to walk in a separate path: yet his views are liberal and extensive: his heart seems to have glowed with benevolence: his book contains much observation of human actions; displays an intimate acquaintance with the motives which sway the human heart; and, though by no means a perfect system for education, is yet superior to what many other writers had before done upon the subject.'

With those who estimate with an impartial eye the value of the blessings which life affords, the business of education is a most important task. It is the formation of the heart to virtue, of the mind to cheerfulness, of the understanding to wisdom. It is the teaching a child to open his eyes to the circumstances by which he is surrounded; to distinguish virtue from vice; truth from falsehood; beauty from deformity; and happiness from misery: to qualify him to attribute neither more nor less than its proper importance to every acquisition and every pursuit; and, instead of being borne along by the follies and the prejudices of mankind, to raise himself above them to that degree of mental eminence and moral excellence, which will enable him to judge distinctly of the value of all earthly enjoyments, and, by the strength of his own faculties, to select those, and those only, which will contribute to his temporal and eternal good. Education, says Dr. Cogan, when developing its influence upon the passions, introduces to an intimate acquaintance with numberless objects which are totally unknown to the ignorant; and every object possesses some quality of a pleasant or unpleasant nature, proportionably multiplying or diversifying our agreeable or disagreeable sensations. With the ignorant, objects are comparatively few. Scenes before them are of no great extent; and even these are overlooked by the majority, whose years pass away in a kind of sensitive indolence, without apathy or affection. Sometimes, however, a natural acuteness of understanding is observable among the most illiterate, accompanied with lively sensations and very strong affections; and when they are once aroused, by objects that appear interesting, their passions are most violent. What they know can alone appear important to them—and the very little they possess is their all. Their whole souls are concentrated in that which gives pleasure, and all the powers of body and mind are exerted to repel whatever gives pain. This will indicate the cause of that remarkable strength of passions and affections, both of the benevolent and malevolent kind, so observable in savage nations; and the impetuosity of character so often to be met with among the active and uninformed in every nation.

The cultivated mind, by increasing its acquaintance with innumerable subjects, will inevitably discover some pleasing quality in every object of its pursuit: of consequence, both attention and affections are divided and subdivided into innumerable ramifications; and thus, although enjoyment may upon the whole be augmented by aggregate numbers, yet each individual quality possesses but a moderate share of influence. The young and inexperienced are generally affected by simple objects. The causes of their joy or anger, sorrow or fear, are seldom complex. As the powers of the mind are more enlarged, the affections are both more diversified, and rendered more complicated. Thus, upon the perception of favors and obligations, the joy

from good becomes united with gratitude to the author of that good; with love, veneration, and respect for his character; with admiration at the extent of the good, or at some peculiarity in the delicacy and liberality with which it was conferred. Experience introduces the passions of hope and fear, by teaching us the knowledge of good worth possessing, on the one hand, and the accidents to which it is liable on the other. It is observable, farther, that the young and inexperienced, whose habits are not yet formed, and to whom every thing is new, are most apt to be influenced by the introductory emotions of surprise and wonder. This inexperience renders things and events, which are familiar to others, new and strange to them. They are prone to be in ecstasies for acquisitions and advantages comparatively trifling, and to be agitated by small or imaginary evils, because their imaginations have not been corrected by experience. But if these passions, from more simple causes, are frequently stronger in them than in others, it is equally true that their affections are less permanent. A rapid succession of novelties, and the immense variety which increased knowledge introduces, quickly efface the preceding impression. But the extent of this subject enjoins brevity. A whole encyclopædia could scarcely do it justice. The infinite diversity of pursuits, which in this age engage the attentions of an awakened world, are accompanied by an equal diversity of predilections; they present an infinite variety of qualities to the inquisitive mind, which excite their correspondent emotions and affections.

The business of education comprehends much indeed. It includes the circumstances of the child in regard to local situation, and the manner in which the necessaries and conveniences of life are supplied to him; the degree of care and tenderness with which he is nursed in infancy; the examples set before him by parents, preceptors, and companions; the degree of restraint or licentiousness to which he is accustomed; the various bodily exercises, languages, arts, and sciences which are taught him, and the method and order in which they are communicated; the arts of overcoming prejudices, of guarding against evil influences, of conquering temptations, and of governing himself; and it constantly regards, as of the greatest importance, the imbuing the mind with the principles of morality and religion. In different periods of society, in different climates, and under different forms of government, various institutions have naturally prevailed in the education of youth; and even in every different family, the children must be educated in a different manner, according to the varieties in the situation, dispositions, and abilities of the parents.

The modern *improvements in education* have been great; they are connected with the education of all ranks, but have more particularly concerned our public schools, and the extension of this invaluable blessing, by economical methods, to the poor.

I. First, in order of time, stand *Sunday schools*. The excellent founder of them, Mr. Robert Raikes, a gentleman of Gloucestershire (in which county he was born 1735), seems at first to have had his attention engaged to the general condition of the poor, by observing the miserable moral state of the prisoners confined for less crimes in the county jail. In a letter to a gentleman who had applied to him for the particulars of the nature and origin of his plan, he thus expresses himself:—

'Some business leading me one morning into the suburbs of the city, where the lowest of the people (who are principally employed in the pin manufactory) reside, I was struck with concern at seeing a group of children, wretchedly ragged, at play in the street. I asked an inhabitant whether those children belonged to that part of the town, and lamented their misery and idleness. Ah! sir, said the woman to whom I was speaking, could you take a view of this part of the town on Sunday, you would be shocked indeed; for then the street is filled with multitudes of these wretches, who, released on that day from their employment, spend their time in noise and riot, playing at chuck, and cursing and swearing in a manner so horrid, as to convey to any serious mind an idea of hell rather than any other place. We have a worthy clergyman, said she, minister of our parish, who has put some of them to school; but upon the sabbath they are all given up to follow their inclinations without restraint, as their parents, totally abandoned themselves, have no idea of instilling into the minds of their children, principles to which they themselves are strangers.

'This conversation suggested to me, that it would at least be a harmless attempt, if it were productive of no good, should some little plan be formed to check this deplorable profanation of the sabbath. I then enquired of the woman if there were any decent, well-disposed women in the neighbourhood, who kept schools for teaching to read. I was presently directed to four. To these I applied, and made an agreement with them, to receive as many children as I should send on the Sunday, whom they were to instruct in reading and the church catechism. For this I engaged to pay them a shilling for their day's employment. The women seemed pleased with the proposal. I then waited on the clergyman before-mentioned, and imparted to him my plan. He was so much satisfied with the idea that he engaged to lend his assistance by going round to the schools on a Sunday afternoon, to examine the progress that was made, and to enforce order and decorum among such a set of little heathens.

'This, sir, is the commencement of the plan. It is now about three years since we began, and I could wish you were here to make enquiry into the effect. A woman who lives in a lane where I had fixed a school, told me some time ago, that the place was quite a heaven upon Sundays, compared to what it used to be. The numbers who have learned to read and say their catechism are so great that I am astonished at it. Upon the Sunday afternoon the mistresses take their scholars to church, a place into which neither they nor their ancestors ever entered with a view to the glory of God. But what is yet more extraordinary, within this month, these little ragamuffins have in great numbers taken it into their heads to frequent the early morning prayers,

which are held every morning at the cathedral at seven o'clock. I believe there were near fifty this morning. They assemble at the house of one of the mistresses, and walk before her to church, two and two, in as much order as a company of soldiers. I am generally at church, and after service they all come round me to make their bow; and, if any animosities have arisen, to make their complaint. The great principle I inculcate is to be kind and good-natured to each other; not to provoke one another; to be dutiful to their parents; not to offend God by cursing and swearing; and such little plain precepts as all may comprehend. As my profession is that of a printer, I have printed a little book, which I give amongst them; and some friends of mine, subscribers to the Society for promoting Christian Knowledge, sometimes make me a present of a parcel of Bibles, Testaments, &c., which I distribute as rewards to the deserving. The success that has attended this scheme, has induced one or two of my friends to adopt the plan, and set up Sunday schools in other parts of the city, and now a whole parish has taken up the object; so that I flatter myself in time the good effects will appear so conspicuous as to become generally adopted. The number of children at present thus engaged on the sabbath are between 200 and 300; and they are increasing every week, as the benefit is universally seen. I have endeavoured to engage the clergy of my acquaintance that reside in their parishes. One has entered into the scheme with great fervor; and it was in order to excite others to follow the example, that I inserted in my paper the paragraph which I suppose you saw copied into the London papers. I cannot express to you the pleasure I often receive in discovering genius and innate good dispositions among this little multitude. It is botanising in human nature. I have often too, the satisfaction of receiving thanks from parents, for the reformation they perceive in their children. Often I have given them kind admonitions, which I always do in the mildest and gentlest manner. The going among them, doing them little kindnesses, distributing trifling rewards, and ingratiating myself with them, I hear, have given me an ascendancy, greater than I ever could have imagined; for, I am told by their mistresses, that they are very much afraid of my displeasure. If you ever pass through Gloucester, I shall be happy to pay my respects to you, and to show you the effects of this effort at civilisation. If the glory of God be promoted in any, even the smallest degree, society must reap some benefit. If good seed be sown in the mind, at an early period of human life, though it shows itself not again for many years, it may please God, at some future period, to cause it to spring up, and to bring forth a plenteous harvest.'

Mr. Raikes's first effort bears date about the close of the year 1781, or the beginning of 1782; and the system began to extend itself in the city of Gloucester. Having tried the experiment for more than a year, he determined to invite the public attention to a scheme which he perceived to be fraught with such benefits. For this purpose he inserted a paragraph in a weekly newspaper, of which he was the editor and printer. The following is a copy of this important notice:—

'*Gloucester Journal*, *Nov.* 3, 1783.

'Some of the clergy in different parts of this county, bent upon attempting a reform among the children of the lower class, are establishing Sunday schools for rendering the Lord's day subservient to the ends of instruction, which has hitherto been prostituted to bad purposes. Farmers, and other inhabitants of the towns and villages, complain that they receive more injury in their property on the sabbath than all the week besides; this in a great measure proceeds from the lawless state of the younger class, who are allowed to run wild on that day, free from every restraint. To remedy this evil, persons duly qualified are employed to instruct those that cannot read; and those that may have learnt to read, are taught the catechism, and conducted to church. By thus keeping their minds engaged, the day passes profitably, and not disagreeably. In those parishes where this plan has been adopted, we are assured that the behaviour of the children is greatly civilised. The barbarous ignorance in which they had before lived, being in some degree dispelled, they begin to give proofs that those persons are mistaken, who consider the lower orders of mankind as incapable of improvement, and therefore think an attempt to reclaim them impracticable, or, at least, not worth the trouble.'

His statement of the good effects of his schools, caught the attention of a gentleman in Lancashire, before alluded to, who wrote immediately to Mr. Raikes, and received the letter already given. By permission of its author, this epistle was printed in one of the numbers of the Gentleman's Magazine for 1784 (vol. liv. p. 410). Through the medium of this publication, the plan was laid before thousands of the most intelligent members of society in the kingdom. Mr. Raikes soon had to answer the enquiries of other correspondents anxious to gain information on this new and important subject.

The scheme began now to be very generally known and adopted. Christians of all denominations, wondering that it should never have been devised before, seemed determined to repair, as much as possible, the mischief of past neglect, by applying with the utmost diligence the benefits of this new discovery in the world of morals and religion. Several public-spirited gentlemen in the metropolis, perceiving that the system would be greatly aided by the establishment of a society, which should combine the patronage and energies of all denominations of Christians, held a preparatory meeting August 30th, 1785, to take into consideration the propriety of forming a society for establishing and supporting Sunday schools for the instruction of poor children, in different parts of the kingdom. In consequence of a resolution then passed, a public meeting was holden on the 7th of September, and an institution formed, bearing the title of 'A Society for the Support and Encouragement of Sunday Schools in the different Counties of England.' This establishment was exceedingly beneficial to the growing cause. By the respectability of its mem-

ers, it increased the public confidence; by their ılents it enlightened the public mind; by their ctivity it stimulated the public zeal; and, by heir property, it assisted the public expendiure.

It was an object of importance with the committee of the Sunday School Society, to engage he co-operation of episcopal authority within the ale of the established religion of the country; nd it must be spoken to the honor of the bishops, ıat they promptly came forward, and cast the eight of their mitres into the scale of this good ause. Among the dignitaries of the church, ho patronised the plan, the bishops of Salisbury nd Llandaff, and the deans of Canterbury and incoln, obtained a conspicuous place by their eal and talents. So rapidly had the flame spread ırough the country, that, by the close of 1786, is conjectured that not less than 250,000 chilren were every Sunday receiving instruction.

The schools were at first universally conducted y hired teachers. This entailed a load of peuniary difficulty upon the plan, which, had it ot been removed, must have considerably reırded its progress, and consequently diminished s usefulness. The Sunday School Society alone xpended, during the first sixteen years of its exıtence, no less than £4000 in the salaries of eachers. And this was not the least evil attendıg upon purchased labor. Hireling teachers can arcely be expected to possess either the zeal or bility of those who now engage in the work from ıotives of pure benevolence. Gratuitous instrucon was an astonishing improvement of the sysm; and which does not appear to have entered ıto the views of its benevolent author. 'If we ere asked,' says a writer in the Sunday School epository, 'whose name stood next to that of obert Raikes in the annals of Sunday Schools, e should say, the person who first came forard, and voluntarily proffered his exertions, his me, and his talents, to the instruction of the oung and the poor; since an imitation of his exmple has been the great cause of the present ourishing state of these institutions, and of all ıat future additional increase which may be easonably anticipated. At what precise period ıis was first introduced, does not appear, or here it commenced, so that the award of this econd honor is reserved for the decision of the ıst day. About the year 1800 this plan became ery general through the kingdom.'

The improvement in the mode of popular ducation, introduced by Dr. Bell and Mr. Lanaster, to which we shall immediately advert in more particular manner, must be considered as orming another era in the history of Sunday chools. The advantage derived from these seful systems, does not merely consist in a serile imitation of all their arrangements, but in emonstrating to the world, more clearly than vas ever shown before, that education is an art usceptible of indefinite improvement, and in xciting an ardor, before unknown, to carry it n to perfection.

The institution of Sunday schools was now ecome universal in this kingdom. Every city, nd every town had warmly espoused the cause. till there was one thing wanting to raise the system to the highest degree of efficiency, and that was union. Reasoning upon the general principle, many were led to conclude, that great benefits would result to this particular case, from an association of counsel and energy. After much private intercourse on this subject, between many persons in London, a public meeting was holden, July 13th, 1803, in the schoolrooms belonging to Surrey chapel, and the Sunday School Union was then formed.

This new society commenced its operations with no less prudence than vigour. Carefully abstaining from even the appearance of a desire to interfere with the private management of any of the associated schools, it aimed to diffuse new life and energy through them all. One of its first objects was the compilation of a new spelling book, more adapted to moral and religious instruction than any they could find already in existence. This production reflects no small degree of credit on its industrious compilers. The next object of the committee was to ascertain, by an extensive correspondence, what parts of the country were most destitute of schools. Finding, in many places, that the advantages of the system were greatly diminished by the want of method and order which prevailed in the schools, they published in 1806, 'A plan for the Formation and Regulation of Sunday Schools.'

The example of the metropolis was soon imitated by many of the large towns, and several counties. Unions were formed in different parts of the kingdom, from which the happiest effects have resulted; among which may be reckoned the establishment of new schools in neglected parts of large towns, and amidst the darkness of benighted villages;—a fresh excitement given to those employed in the work of tuition;—the diffusion of Christian affection;—and in some instances a great improvement in the mode of instruction. The formation of the Sunday School Union must, therefore, be regarded as an event of vast importance to the success of this valuable scheme. Surprising it is to state, but it was not until the year 1816, that the first Sunday school in America was opened at New York. The Wesleyan Methodist Missionaries had opened one the year previous in the heart of the island of Ceylon.

In an account like the present, the establishment of the Scotch Sabbath Evening Schools, ought not to be omitted, as they may be fairly stated to have arisen out of the English Sunday School Institution. The children of the poor, so far as common education is concerned, are all taught to read in the parochial schools, which are established in the southern parts of that enlightened country. Still, however, as it respects the observance of the sabbath, and the more direct business of religious instruction, like the children in this kingdom, they are left of course to the care of their parents, multitudes of whom, indifferent to the welfare of their own souls, feel no solicitude for the salvation of their offspring. Observing and commiserating the condition of these neglected youth, who in great numbers spent the sabbath, and especially the sabbath evenings, in profanity and vice,

the friends of religion in Edinburgh formed the pious resolution of collecting them together on the Lord's day evenings, for the purpose of imparting religious knowledge. They assemble at six o'clock, and are dismissed about eight; during which time every effort is made to instruct them in the way of eternal salvation, and to urge them forward in the path of life. This admirable system commenced in Edinburgh, in the year 1787, and soon spread through all the principal towns of Scotland. How desirable that it should pass the Tweed, and be adopted in England! There is one class of youth, to whom it might become an incalculable blessing; i. e. the elder boys and girls, who have just left other schools, and who are generally considered as gone beyond their care. Thus abandoned, it is too commonly the case, that they lose all the little impression they have received while under instruction. Could they be collected together on a sabbath evening, to be taught by those who would interest themselves in their welfare, what a blessing might be expected to accrue!

Adult Schools were originally a ramification of the Sunday school system. The first school for the instruction of adult persons exclusively, was opened in the summer of 1811, in North Wales, through the efforts of the Rev. T. Charles, episcopal minister of Bala, Merionethshire. The success of the undertaking was considerable; multitudes in every district repaired to the chapels, or other places appropriated to the purpose, for instruction, and the most beneficial results became every where observable. Mr. Charles's own account is as follows:—

'My maxim has been for many years past to aim at great things; but if I cannot accomplish great things, to do what I can, and be thankful for the least success; and still to follow on without being discouraged at the day of small things, or by unexpected reverses. For many years I have laid it down as a maxim to guide me, never to give up a place in despair of success. If one way does not succeed, new means must be tried; and if I see no increase this year, perhaps I may the next. I almost wish to blot out the word impossible from my vocabulary, and obliterate it from the minds of my brethren. We had no particular school for the instruction of adults exclusively, till the summer of 1811; but many attended the Sunday schools with the children, in different parts of the country, previous to that time. What induced me first to think of establishing such an institution, was the aversion I found in the adults to associate with the children in their schools. The first attempt succeeded wonderfully, and far beyond my most sanguine expectations. The report of the success of this school soon spread over the country, and in many places the illiterate adults began to call for instruction. In one county, after a public address had been delivered to them on the subject, the adult poor, even the aged, flocked to the Sunday school in crowds; and the shop-keepers could not immediately supply them with an adequate number of spectacles. Our schools, in general, are kept in our chapels; in some districts, where there are no chapels, farmers, in the summer time, lend their barns. The adults and children are sometimes in the same room, but placed in different parts of it. When their attention is gained and fixed, they soon learn; their age makes no difference, if they are able, by the help of glasses, to see the letters. As the adults have no time to lose, we endeavour, before they can read, to instruct them without delay, in the first principles of Christianity. We select a short portion of Scripture, comprising the leading doctrines, and repeat them to the learners, till they can retain them in their memories; and which they are to repeat the next time we meet.'

Soon after this, at the second anniversary of the Bristol Auxiliary Bible Society, among other intelligence communicated to the meeting, a letter from Keynsham was read, which contained the following sentence:—'We have been necessarily obliged to omit a great number of poor inhabitants who could not read, and therefore are not likely to be benefited by the possession of a bible.' This statement struck the attention of an individual present, by the name of William Smith. To be deprived of the inspired volume by an inability to peruse it, appeared to him worse than for a man to be dying of the plague, through ignorance of the way of applying a remedy, which in itself was within his reach. His benevolent mind meditated upon their situation. He longed to relieve them, but scarcely dared to hope that the case admitted of relief. In this dilemma he consulted Stephen Prust, Esq. a respectable merchant in the city, whose name stands high in the long list of Bristol philanthropists; and, in the advice and support of this gentleman, the scheme of Smith met the sun-shine which it wanted. He slept not a second night upon his plan, after he had received the promise of his generous friend to assist him in the undertaking, before he commenced his exertions. As he was employed the next day in collecting subscriptions for the Bible Association, whenever he met with persons who could not read, he asked them if they would like to learn, provided a school should be opened. Many embraced the offer with expressions of pleasure, and their names were taken down. Two rooms were immediately obtained, and the work of instruction commenced. So little could the ardor of Smith endure delay, that in nineteen days after he had disclosed his mind to Mr. Prust, the school was opened with eleven men and ten women. The number rapidly increased, till, a few weeks after, some active friends to the cause of religion and humanity, met the founder of the new institution, and formed themselves into a society, bearing the title of 'An Institution for Instructing adult Persons to read the Holy Scriptures.' The society continued to attract the attention, and engage the support of Christians of all denominations; and at length received a most valuable accession in the active co-operation of Thomas Pole, M. D., a physician in connexion with the society of Friends. Within the period of two years, this society admitted 1508 scholars, exclusive of 276 who were taught by schools belonging to several dissenting congregations.

Public adult tuition has been since somewhat modified, both at Bristol and in other places, in conformity with the aversion of the grown-up

poor to an exposure of their ignorance. The plan of private schools has accordingly been adopted, by which a few neighbours are associated together, and taught at their own habitations, or in a private manner at some convenient place. Since this period, adult schools have been established in various parts of the kingdom; at Plymouth, Salisbury, Uxbridge, Sheffield, Norwich, Ipswich, and other places; and these examples of benevolence have not been disregarded or unimitated by the metropolis.

But the most brilliant of all our modern discoveries and improvements in this important science of sciences, is the *New System* of Education, which, however warmly opposed for a time, may now be regarded as established. With Dr. Bell, originally a superintendent of the Military Male Orphan Asylum at Madras, the first idea of this system clearly originated. This was a public charity resembling the Royal Military Asylum at Chelsea. A salary of 1200 pagodas, £480, was attached to Dr. Bell's office when he entered upon it, but this he declined; accepting the office solely for the sake of being more useful; it is said, in his station than he could hope to be by any other means. 'Here,' he reasoned with himself, 'is a field for a clergyman to animate his exertion, and encourage his diligence. Here his success is certain, and will be in proportion to the ability he shall discover, the labor he shall bestow, and the means he shall employ. It is by instilling principles of religion and morality into the minds of the young, that he can best accomplish the ends of his ministry: it is by forming them to habits of diligence, industry, veracity, and honesty, and by instructing them in useful knowledge, that he can best promote their individual interest, and serve the state to which they belong,—two purposes which cannot, in sound policy, or even in reality, exist apart.' With these feelings, and with this sense of duty, Dr. Bell began his task. He had to work upon the most unpromising materials. It was an established opinion, that the half-caste children were an inferior race, both in moral and intellectual faculties, as if a certain mulish obliquity of nature had been produced by crossing colors in the human species. This opinion was like one of those prophecies which bring about their own accomplishment. Dr. Bell knew how deeply it was rooted, and saw but too plainly that it rested upon apparent experience; he knew also, that these children learnt from their unhappy mothers that cunning, and selfishness, and deceit, which become the defensive instincts of a despised and degraded generation; the baleful prejudice which prevailed against them inevitably producing the vices which it pre-supposed. The boys placed under his care were in general stubborn and perverse, addicted to trick, lying, and duplicity; and those among them who were farther advanced in age were, for the most part, trained in habits and customs incompatible with that method without which no system of education could proceed.

'I soon found,' says he, 'that if ever the school was to be brought into good order, it must be done, either by instructing ushers in the economy of such a seminary, or by youths from among the pupils trained for the purpose. For a long time I kept both these objects in view; but was in the end compelled, after the most painful efforts of perseverance, to abandon entirely the former, and adhere solely to the latter. I found it difficult beyond measure to new-model the minds of men of full years, and that whenever an usher was instructed so far as to qualify him for discharging the office of a teacher of this school, I had formed a man who could earn a much higher salary than was allowed at this charity, and on far easier terms. My success, on the other hand, in training my young pupils in habits of strict discipline, and prompt obedience, exceeded my expectation: and every step of my progress has confirmed and rivetted in my mind the superiority of this new mode of conducting a school through the medium of the scholars themselves.'—*Experiment*, first edition, p. 10.

'It is in this mode of conducting a school that the discovery consists; this mode, which is briefly termed self-tuition, is the principle of the new school, and the new system rests wholly upon it. This is the key-stone of the arch,—the main-spring of the watch,—the moving power of the whole machine. Dr. Bell did not come to the superintendence of the Madras Asylum prepared with his theory, and ready to put it in execution. He found the school with an establishment of one master and two ushers, and as the school increased one of the boys was added as head-teacher, so that there were four nominal masters continued to the 22d of January, 1796. But when the report was drawn up five months afterwards (June 28), and the school had increased farther to the number of 200, the masters were reduced to three. 'None of these masters had made a progress in letters equal to the boys in the first class.' Their duty, it is expressly stated, was not to teach, but to look after the various departments of the institution. As teachers they had been gradually superseded, and from the 1st of June, 1795, the school was 'entirely taught by the boys.' This was one of the cases in which practice led to theory.'

Dr. Bell perceived the expense of time, labor, and punishment, which the common system of tuition requires, and, having found a remedy, perceived also wherein the principle of that remedy lay, and as a principle acted upon it and announced it to the world. Every class had its teacher and assistant. Give me four and twenty children to-day, was a saying of Dr. Bell, and I will give you as many teachers to-morrow as you want. There was no hesitation in degrading a teacher who failed in any of the tasks required of him, and making trial of another, till one was found fit for the office; these teachers had no other occupation, no other pursuit, nothing to employ their minds but this single object; they could do that only which they were assigned to do, and they did it the better, because they themselves knew nothing more than what was perfectly level to the capacities of their pupils.

The first attempt which Dr. Bell made to introduce a new practice in the school, proved to him the necessity of proceeding upon this principle. At first sight of a Malabar school, his attention had been caught by the manner in

which the letters were taught in sand; yet he could not fully establish even so simple a practice as this, till he had trained boys whose minds he could command, and who, as he says, 'only knew to do as they were bidden, and were not disposed to dispute or evade the orders given them.' Many advantages arise from this easy improvement, besides the great and obvious saving of expense. A distinct notion of the different form of the letters is immediately obtained, and the difficulty of distinguishing those letters whose very difference of form is founded upon their similarity (b and d, p and q, for instance), by which children are so long perplexed, is removed at once. The scholar, at the same time, learns so much of the art of writing, as materially to facilitate his progress when he arrives at that class wherein it is taught.

The next improvement of the Madras school, was the practice of syllabic reading: the child, after he had learnt to read and spell monosyllables, was not allowed to pronounce two syllables till he had acquired, by long practice, a perfect precision; upon the common plan, children make continual blunders, in the beginning and middle, and more especially in the termination of words: to prevent this confusion, they were taught to read syl-la-ble by syl-la-ble, and, when so far advanced as to read sentences, to pause awhile at the end of every word. 'So much,' says Dr. Bell, 'for the first minutiæ: were I to pursue this subject through all its stages I should fill a volume.' From the commencement of his experiment, he made the scholars, as far as possible, do every thing for themselves. If a bad subject came to school, a good boy was chosen to take care of him, teach him right principles, treat him kindly, reconcile him to the school, and render him happy like the rest in his situation. The consequence of such a system was, that the boys, feeling themselves happy, felt also that their advantage was the only object which the master had in view; they were sure of his favor if they continued to do right, they were certain of his disapprobation and displeasure if they offended; but knowing that he was just, and feeling that he was good, they regarded him as their friend, and benefactor, and common parent. An annual saving of not less than 2400 pagodas, or £960, upon the education and support of 200 boys, was produced in the institution at Madras, by Dr. Bell's regulations and improvements!

After superintending the school for seven years, he found it necessary for his health to return to Europe. The directors of the charity passed a resolution for providing him a passage in any ship in which he might wish to sail; declaring at the same time, that, under the wise and judicious regulations which he had established, the institution had been brought to a degree of perfection and promising utility 'far exceeding their most sanguine expectations when it was established.'

These testimonies Dr. Bell published in 1797, on his arrival in Europe, in a little duodecimo pamphlet, under the title of An Experiment in Education, made at the Male Asylum of Madras; suggesting a system by which a school or family may teach itself under the superintendence of the master or parent.

When the manuscript of this little work was put into the hands of the publisher, says a friend of his, whose account of the system we follow, Dr. Bell said to him, 'You will think me an enthusiast; but in a thousand years this system of tuition will spread over the world!' What he meant by 'the system' is apparent both from the title and the whole tenor of the pamphlet;—not writing in sand, not syllabic reading, nor any of the improvements in detail, but the main principle and main-spring of the whole, 'by which a school or family may teach itself, under the superintendence of the master or parent,' the 'new mode of conducting a school through the medium of the scholars themselves.' Had Dr. Bell done no more than conceive the idea of this new system, and publish it to the world, he would have done enough. Whoever might have been the first person to carry the system into effect, the discovery would have been his, and to have imputed it to any other person would have been as unreasonable as it would be to ascribe the great discovery of Franklin, respecting the sameness of electricity and lightning, not to him but to the French Curé, who, while Franklin waited for the erection of a tower then building at Philadelphia, to which he might affix his metallic rod, set up a conductor according to the American philosopher's instructions, and verified Franklin's theory by thus bringing down the lightning, before it was known in Europe that Franklin had verified it himself by means of a paper-kite.'

The Charity school of St. Botolph, Aldgate, was the first place in England where Dr. Bell's discovery was adopted. 'That the principle of the new system,' says another able writer on this topic, 'essentially consists in the tuition of the scholars by the scholars, in classes of equal proficiency, by short, easy, and perfect lessons, and not in any of the practises either introduced into the male asylum by Dr. Bell, or subsequently by Mr. Lancaster, is most clearly and satisfactorily proved by this simple criterion. Discard all the peculiar practices or contrivances of the school, and, if the tuition by the scholars be duly carried on, the difference of progress will not be greatly material. On the other hand, discard the system of tuition by the scholars, and retain all the practices, the charm ceases, subordination and diligence cannot be so readily maintained, punishments must be resumed, and, after all, the school is comparatively inoperative. The system, therefore, is evidently one and the same in both cases, and in all its applications. If a Mahommedan were to start up and apply it to the Koran, or a brahmin to the Shaster, it would be equally reasonable for them to call it the Mahommedan or the Hindoo system, as for Mr. Lancaster to call it Lancasterian, unless he can prove that it originated with him.'

Having thus fairly traced the new system to its inventor, we may be allowed to claim for Mr. Lancaster the great merit of having by indefatigable zeal, first made the system *generally known* in England, and of having procured for it the patronage of many exalted and distinguished

individuals, with the Sovereign at their head. He opened his free school in the Borough in the year 1800. In the year 1803, in the first edition of his Improvements in Education, (part 3rd. page 44) he wrote thus;—'I ought not to close my account, without acknowledging the obligations I lie under to Dr. Bell, of the male asylum at Madras, who so nobly gave up his time, and liberal salary, that he might perfect that institution, which flourished greatly under his fostering care. He published a tract in 1798, entitled an Experiment on Education, made at the male asylum of Madras, suggesting a system whereby a school or family may teach itself, under the superintendence of the master or parent. From this publication I have adopted several useful hints; I beg leave to recommend it to the attentive perusal of the friends of education, and of youth. I am persuaded nothing is more conducive to the promotion of a system than actual experiment. Dr. Bell had 200 boys, who instructed themselves, made their own pens, ruled their books, and did all that labor in school, which among a number is light, but resting on the shoulders of the well-meaning, and honest, though unwise teacher, often proves too much for his health, and embitters or perhaps costs him his life. I much regret that I was not acquainted with the beauty of his system, till somewhat advanced in my plan; if I had known it, it would have saved me much trouble, and some retrograde movements. As a confirmation of the goodness of Dr. Bell's plan, I have succeeded with one nearly similar in a school attended by almost 300 children.

Mr. Lancaster was afterwards vain enough to state, in the public papers, that having 'invented under the blessing of Divine Providence, a new and mechanical system of education, for the use of schools, he feels anxious to disseminate the knowledge of its advantages through the united kingdom;' and vanity was his complete overthrow. He had the merit we have willingly ascribed to him, and, in addition to this, he invented a few economical practices in the use of slates and spelling cards, which are equally applicable to all schools conducted on the new system, and which have been adopted in Dr. Bell's school, without any denial of their origin, just as the sand-writing and syllabic spelling were confessedly borrowed from Dr. Bell. He invented also a variety of new punishments, in the application of which his scholars were made the correctors, no less than the instructors of each other; and many of which were of a nature very questionable in their bearing on the moral character; that is, calculated to make the pupils insolent, turbulent, and overbearing.

Sorry we are to add, that not only was the question of originality agitated at first with many bitter personal feelings between the friends of these parties, but it insensibly mingled itself with religious controversy. An advocate on the side of Dr. Bell, and the Madras system, says with great candor: 'We are sorry to admit that there was no great appearance of acceleration in the proceedings of the Church, till Mr. Lancaster started up with all the eagerness and activity of a sectary—with all the zeal of a missionary—with all the adventitious motives and practices of a person whose subsistence and reputation depended upon the success of his plan; and fortified with all the countenance and support of the host of sectaries, whose eagle-eyes perceived at a glance what an opportunity was offered, at once to place the cause of humanity in opposition to that of the Church,—what a glorious occasion was presented to associate in the minds of the people the ideas of charity and dissent.' *British Review, No.* 6.

Mr. Lancaster, and what was now called the British system, admitted and taught the reading of the Bible, in fact, into the schools founded upon his plan, but excluded all catechisms. 'Impelled by all these aids and motives, continues the above writer, Mr. Lancaster soon became the prominent character on the canvass, and by the great mass, both of the clergy and laity, who had never heard of Dr. Bell, was considered as the necessary, indeed the only instrument through whom the new system could be carried into practice. And we shall ever consider it as reflecting immortal honor on many zealous ministers of the church, that the practicability of the plan was no sooner shown by Mr. Lancaster, than they immediately lent him their countenance; and finding to their regret that no propositions, having in view the general instruction of the poor, were then circulated and enforced by the authority of the church as a body, they trusted to their own individual exertions to make Mr. Lancaster's plan square as well as they could with the interests of the church. We should certainly have been glad to see her interfere sooner, as soon indeed as it was evident and publicly notified by experience that the new system imported by Dr. Bell was a practicable one for the instruction of the poor. We should then have been furnished with a stronger argument than we now possess for repelling the sneering insinuations of those, who lose no opportunity of observing, that, but for the exertions of Mr. Lancaster and his partisans, and the fear and emulation which they have excited, the prospects of general instruction for the poor would have been very different from what they now are. By whatever means, however, the effect was produced, the Church is at length roused, and those who wish to secure to the rising generation of the people a knowledge of the excellence of her doctrines, may now do so without any alloy of danger, which even the most trembling solicitude for her safety can entertain.'

The question of the comparative economy of the two schools has been thus stated:—Dr. Bell introduced the knowledge of sand-writing and syllabic spelling, which Mr. Lancaster confessedly borrowed from him. Mr. Lancaster, having first opened a large school, introduced the economical use of slates in many cases where paper-books were necessarily used at Madras. But these slates are now used in Dr. Bell's schools. Mr. Lancaster also invented a large card, with the letters and short words printed thereon, one of which stuck against the wall serves the whole class to read from: whereas Dr. Bell prefers that each child should have a small card of its own, which it may look at and

con over at its pleasure. The difference in the first cost of these instruments amounts to about seven shillings per 100 children yearly; and the use of either is a matter of mere opinion as to the advantage of giving each child's lesson into its own hand. Many of Dr. Bell's schools use the large cards, many of Mr. Lancaster's the small ones; a few Bibles and Testaments are admitted to be as necessary in Mr. Lancaster's schools as in Dr. Bell's. So that in fact the two schools are now on a perfect equality as to expense. The use of slates, or of paper books, for writing and ciphering, depends on the respective tastes of the master or patrons. If they think the pride and pleasure which a child and his parents take in looking back upon the records of the progress he has made will more than repay the expense of paper books, they will adopt them. If they think otherwise, or if their funds are very confined, they will reject them. The system will be neither the better nor the worse for their determination either way, or for the adoption or omission of the small or the large card, or for a multitude of other things, about which much noise has been made.

The Madras system has become the basis of the National Schools connected with the established church throughout the kingdom; and large and well earned are its triumphs over the wretchedness and ignorance of the poor. The British and Foreign School Society, into which the British system is now merged, is, on the other hand, principally in the hands of dissenters; nor can it be denied the meed of praise for great and noble exertions in the cause of universal education. Mr. Lancaster, as we have intimated, has worn out his warmest friends in this country by his personal vanity and extravagant conduct; but the system is under very respectable and disinterested management. It is said, by competent judges, that the pupils of the National Schools excel in reading; while those of the British and Foreign School system are superior in their acquaintance with arithmetic.

But the plans of Dr. Bell were yet more extended. He himself gave the public, in 1815, an interesting, though somewhat verbose, publication, entitled 'Ludus Literarius: the Classical and Grammar School; or an Exposition of an Experiment in Education, made at Madras in the years 1789—1796; with a view to its Introduction into Schools for the Higher Orders of Children,' 8vo.: and at the Charter-house, and some respectable private seminaries, the advantages of mutual instruction among pupils have been most successfully applied.

'In proposing,' says Dr. Bell, 'to transfer the Madras system of education into schools of a higher order, and especially into grammar schools, I make no pretension to superior attainments in literature, nor do I presume to vie with the learned preceptors of our classical schools in skill in languages, or in sciences.

To teach a teacher ill becometh me.

'The task I have in hand is of a less elevated description, and does not require deep erudition. It is not the science of letters, but the art of tuition, or the mode of communicating that science, of which I am to treat. I do not purpose to add to the master's stock of knowledge, but to put into his hands machinery, by which he may bring down his learning to the level of the capacity of children, disseminate his knowledge among his pupils, and by the simplest instruments, and gentlest means, establish order, check vice, and uphold virtue. For such schools I have no new discovery to develop, no new system to suggest, no improvement on the Madras invention to offer. All I propose is, to show, more particularly than I have heretofore done, the applicability of that invention to schools of other descriptions, than those in which it has long been employed with uniform success. Beyond this the reader need expect nothing entirely original; at the same time, it is true, that in the rudiments of the Latin grammar, independently of this machinery, which will embrace every branch of the scholars' studies, other methods of proceeding will be recommended with regard to elementary lessons, and the introduction to syntax, parsing, and prosody, than those which are usually followed. In the principles, however, on which these processes depend, nay, perhaps in the processes themselves, the master will find nothing but what has been suggested before. He may see nothing but what he knew before, or at least will think, as soon as he has read it, that he knew before—so simple, so plain, and so true shall it be. But my solicitude is, that it may be known in the way which may avail both for the master and his pupil.'

He afterwards proceeds to propose the 'scheme of a school on the model of the Madras system,' which, as it is a key to this great improvement, in all its forms, we subjoin complete:—

'1. The asylum, like every well regulated school, is arranged into forms or classes, each composed of as many scholars as, having made a similar progress, unite together.

'The scholar ever finds his own level, not only in his class, but also in the ranks of the school, being promoted or degraded from place to place according to his relative proficiency.

'So much for the general formation of a school. Now more particularly of the Madras Asylum.

'2. Each class is, when preparing their lessons by themselves, paired off into tutors and pupils.

'Thus in a class of thirty-six scholars, the eighteen best and most trusty are tutors respectively to the eighteen worst.

'This arrangement, by no means an important link in the chain of self-tuition, is frequently dispensed with, and when continued lessons take place, as in the schools of the National Society, it is of course superseded.

'3. To each class is attached an assistant teacher, whose business is, as the name implies, to act under, with, or for the teacher.

'4. The teacher who, with his assistant, has charge of the class, as well when learning, as saying their lessons, and is responsible for their order, behaviour, diligence, and improvement.

'Both the teacher, and his assistant, say their lessons with their class.

'5. A sub-usher, and usher (or rather a competent number of ushers), are appointed, when necessary, to inspect the school, watch over the

whole, and give their instruction and assistance wherever wanted, as the agents and ministers of the master.

'6. The schoolmaster, whose province it is to direct and conduct the system in all its ramifications, and to see all the subordinate offices carried into effect.

'7. Last of all comes the superintendent (who may be the chaplain of the establishment, parochial minister, secretary, treasurer, trustee, or visitor), whose scrutinising eye must pervade the whole machine, whose active mind must give it energy, and whose unbiassed judgment must inspire confidence, and maintain the general order and harmony.

'What goes before comprises the system of tuition by teachers and ushers, or, as they are often called, monitors.

'What follows is for the purposes of precision and inspection, and as checks and instruments of discipline in the execution and superintendence of the above plan.

'8. On the front of the teachers' and assistants' books, when taken in hand, is written with ink the year and day of the month; and throughout their books, the end of each lesson, when given out, is noted by a score with a pencil. Also the sum of the daily lessons (so noted in the marked book), and the other tasks of the day, likewise the individual proficiency of each scholar are entered in a register book for the master's use, and the visitors' reference and inspection.

'9. Black book, as the boys call it, or register of such offences as require serious animadversion, and a weekly scrutiny by

'10. A jury of twelve boys—the peers of the culprits.

'Under perfect instruction, and the able and impartial administration of the laws of the school, the 9th and 10th regulations become a dead letter; the general laws of inspection and emulation being found sufficient for the purpose of discipline.

'This, in brief, is the scheme of the Madras system of education, framed on an extensive scale, and in a multiplied form, fitted for a numerous school.'

We can only admit his further observations 'On the effects of equalised classification.'

'1. Equalised classification extends perfect instruction to every member of a school.

'From the law of classification, by which every scholar claims and assumes his place, not according to his standing or length of time in school, but to his actual proficiency and acquirements, determined by a fair and constant competition with his school-fellows, and is ranked, by this impartial and unerring law, with those with whom he is on a footing of equality; it necessarily follows that no scholar either retards others in their daily course, or is retarded himself: his station in the school, and progress in learning, always bear a just proportion to his talents and industry. No idleness, on the one hand, is occasioned by the want of sufficient employment, from his having his lessons prepared long before those with whom he is associated; and, on the other hand, no scholar is oppressed by the burden of tasks, to which he is unequal, nor his progress stayed by the length and difficulty of lessons, which he cannot overtake.

'Hence it is, that, in a Madras school, a complete acquaintance with every lesson is not, as too frequently happens, confined to scholars of superior parts or industry, but is extended and insured to every scholar in every class; hence too it is, that while there is no let or hindrance to the career of memory, judgment, or genius, there is also an end to dunces in our schools. One boy outstrips another in his gymnasium—his scholastic career; but he who is left behind is master of the inferior ground which he occupies, as well as the other is of the superior station which he has attained. Falsa enim est querela, paucissimis hominibus vim percipiendi quæ tradantur, esse concessam; plerosque vero laborem ac tempora tarditate ingenii perdere, &c.

'It is an unfounded complaint, that very few learners are naturally endowed with the faculty of understanding the lessons which are prescribed to them, and that most do in reality lose their labor and time from defect of genius. Quite otherwise is the fact: for you will find the generality of men quick in conception, and prompt to learn. This is the characteristic of man. As birds are destined by nature to fly, horses to run, and wild beasts to be ferocious: so to us is peculiar the (agitation) working and sagacity of the mind. Hence it is believed, that the human soul is of celestial origin. The dull and the indocile are no more comformable to the nature of man, than bodies which are accounted prodigies and monsters. But these are very rare. Of this fact the good promise, which the generality of children display, is a sufficient proof. And, when it dies away and disappears with age, it is manifest that the fault does not originate in any real deficiency of nature, but arises from want of due culture. It cannot indeed be denied that one excels another in genius, and that some make greater, some less, proficiency. But none can be found who have derived no benefit from study.

'How happily has the Madras system of education illustrated this position, to a degree beyond the conception of the greatest minds of former times! And what an acquisition is it, to the science of instruction, that every scholar who enters a school shall derive continual and progressive improvement during the period of his stay, having his understanding cultivated, and his memory exercised and improved in exact proportion to the strength of the faculties which he possesses! No longer will even a single learner quit a school thus conducted, without having all along been duly occupied in the improvement of his talents, and in the increase of his attainments. None will now by reason of the difficult and disproportioned course of their studies, and the ill assortment of the classes, and by imperfect instruction in the beginning, pass through the forms of their school, as those who wander through a dark and dreary wilderness, toiling and fatiguing themselves to find an exit, without a ray of light, of comfort, or of profit, to their benighted minds—a state in which many were wont to remain till they left school. To others, and those I fear few in number, the time

comes when, after a tedious, irksome, and unprofitable process, age ripens their faculties, and they begin to understand and to relish their daily exercises, and to derive from them profit and pleasure—that profit and pleasure, which, by a sad perversion of instruction, are commonly denied them at the early periods of their studies.

'2. But the new classification not only extends the benefit of perfect instruction to every member of a school alike; but also, by the love of imitation which it indulges, and feeds, and by the emulation which it creates, calls forth the exertion, and accelerates the progress, of each and every scholar.

'As those children, whose talents or rather acquirements are nearly equal, rank in the same class, a spirit of imitation and competition is kept in perpetual action. A lively degree of interest is given to all their occupations, their attention is kept constantly awake, and the several powers of their minds are called forth into constant exercise, by the incessant application of two of the most powerful principles of our nature—the desire of eminence and distinction, and the dread of shame and degradation.'

Dr. Bell's proposals for adapting Lilye's grammar to his new system, and his general plan of instruction with respect to the rudiments of the Latin language, occupy the latter part of his work, and we can only refer our readers to its pages for further information on this point. In conclusion, he says, 'What I seek, as the grand consummation of my labors, and completion of my design, is to put into the hands of our learned and able masters, that new organ of the human mind which is fitted, in a wonderful degree, to minister to their ease, comfort, and utility, as well as to the satisfaction, delight, and improvement of their scholars: and by which alone they can render their institutions in future, what they have been for the past—faithful and true nurseries of youth to the good of the nation, to the character of our nobles, and to the glory of God. If so much has been done towards these ends with the former method of cultivating their rich soils, what fruitful crops may not comparatively be expected from the vast improvements in the art of cultivating the human mind, to which the new machinery has given rise?'

We may add that a Latin, as well as Greek Grammar, has been published on the plan he recommends, by the Charter House.

EDUCE', *v. a.* Lat. *educo.* To bring out; extract.

That the world was *educed* out of the power of space, give that as a reason of its original: in this language, to grow rich, were to *educe* money out of the power of the pocket. *Glanville.*

This matter must have lain eternally confined to its beds of earth, were there not this agent to *educe* it thence. *Woodward.*

The' eternal art *educes* good from ill,
Grafts on this passion our best principle. *Pope.*
Just so the' Omnipotent, who turns
The system of a world's concerns,
From mere minutiæ can *educe*
Events of most important use;
And bid a dawning sky display
The blaze of a meridian day. *Cowper.*

The *eduction* of electricity from the earth is shown by an insulated cushion soon ceasing to supply either the vitreous or resinous ether to the whirling globe of glass or of sulphur. *Darwin.*

EDU'LCORATE, *v. a.* } Fr. *edulcor;* Lat.
EDULCORA'TION, *n. s.* } *dulcoro,* à *dulcis,* sweet. To sweeten; the act of sweetening, or purifying.

(Swine's dung) though not so proper for a garden, is said yet to *edulcorate* and sweeten fruit so sensibly, as to convert the bitterest almond into sweet. *Evelyn.*

EDULCORATION, in chemistry, properly signifies the rendering substances more mild. It consists almost always in taking away acids and other saline substances; and this is effected by washing the bodies to which they adhere in a large quantity of water. The washing of diaphoretic antimony, powder of algaroth, &c., till the water comes off quite pure and insipid, are instances of chemical edulcoration.

EDULCORATION, in pharmacy, is merely the sweetening of juleps, potions, and other medicines, by adding sugar or syrup.

EDWARD FORT, a fort in Nova Scotia, in the town of Windsor in Hans county, said to be large enough to contain 100 men. It is situated on Avon River, which is navigable thus far for vessels of 400 tons: those of sixty tons can go two miles higher.

EDWARDS (George), F.R.A.SS., was born at Stratford, in Essex, April 3d, 1694. Upon leaving school he was put apprentice to a tradesman in Fenchurch-street; but Dr. Nicolas, a relation of his master's, having left him his books, which were removed to an apartment occupied by Edwards, he eagerly employed his leisure hours in perusing them, which entirely deprived him of all inclinations for business, and he resolved to travel. In 1716 he visited the principal towns in Holland, and in about a month returned to England. Two years after he took a voyage to Norway, at the invitation of a gentleman, who was nephew to the master of the ship in which he embarked. At this time Charles XII. was besieging Fredericshall; in consequence of which our young naturalist was confined by the Danish guard, who supposed him to be a spy employed by the Swedes. However, upon obtaining testimonials of his innocence, a release was granted. In 1718 he returned to England, and next year visited Paris, by the way of Dieppe. During his stay in France he made two journeys of 100 miles each; the first to Chalons, in Champagne, in May, 1720; the second on foot, to Orleans and Blois: but an edict happening at that time to be issued for securing vagrants, to transport them to America, as the banks of the Mississippi wanted population, our author narrowly escaped a western voyage. On his arrival in England, Mr. Edwards closely pursued his favorite study of natural history, applying himself to drawing and coloring such animals as fell under his notice

A strict attention to natural, more than picturesque beauty, claimed his earliest care: birds first engaged his attention; and, having purchased some of the best pictures of these subjects, he was induced to make a few drawings of his own; which were admired by the curious, who encouraged our young naturalist to proceed, by paying a good price for his labors. Among his first patrons and benefactors may be mentioned James Theobalds, Esq., of Lambeth. Our artist, thus unexpectedly encouraged, increased in skill and assiduity; and procured, by his application to his favorite pursuit, both a decent subsistence and a large acquaintance. In 1731 he made an excursion to Holland and Brabant, where he collected several scarce books and prints, and saw the original pictures of several great masters. In December 1733, by the recommendation of the great Sir Hans Sloane, Bart., president of the College of Physicians, he was chosen librarian, and had apartments in the college. By degrees he became one of the most eminent ornithologists in this or any other country. His merit is so well known in this respect, as to render any eulogium on his performances unnecessary. He never trusted to others what he could perform himself; and often found it so difficult to give satisfaction to his own mind, that he frequently made three or four drawings to delineate the object in its most lively character and attitude. In 1743 the first volume of his History of Birds was published in 4to. His subscribers exceeding even his most sanguine expectations, a second volume appeared in 1747. The third was published in 1750; and the fourth in 1751. This volume being the last he intended to publish, he seems to have considered it as the most perfect of his productions in natural history, and wrote a curious dedication of it to the great God of nature. Our author, in 1758, continued his labors under a new title, viz. Gleanings of Natural History. A second volume of the Gleanings was published in 1760. The third part, which made the seventh and last volume of his works, appeared in 1764. The whole of his works contain engravings and descriptions of more than 600 subjects in natural history, not before described or delineated. He likewise added a general index in French and English; which was afterwards perfected, with the Linnæan names, by Linnæus himself, who honored him with his friendship and correspondence. On St. Andrew's day, 1750, Mr. Edwards was presented, by the president and council of the Royal Society, with the gold Copley medal. He was a few years afterwards elected F.R.S. and F.A.S., London; and a member of various academies of sciences and learning in different parts of Europe. His collection of drawings, which amounted to upwards of 900, was purchased by the earl of Bute. After the publication of his last work, being arrived at his seventieth year, he retired from public employment to a house which he had purchased at Plaistow; where he was afflicted with cancer in the eyes, and the stone, a complaint to which, at different periods of his life, he had been subject. Yet, in the severest paroxysms of misery, he was scarcely known to utter a complaint. Having completed his eightieth year, emaciated with age and sickness, he died July 23d, 1773, lamented by a numerous acquaintance.

Edwards (Richard), a minor English poet and dramatist of considerable powers, was born in Somersetshire in 1523, and educated at Corpus Christi College, Oxford. He afterwards became a student, and graduated at Christ Church. At the beginning of the reign of queen Elizabeth, he was one of the gentlemen of the royal chapel, and teacher of the children. Much esteemed as a poet and musician by his contemporaries, his death, in 1566, was greatly lamented. He wrote Damon and Pythias, a comedy, acted at court and printed in 1570; Palemon and Arcite, a comedy acted before queen Elizabeth at Christ Church; Sonnets to the beauties of the courts of Mary and Elizabeth in MS., in the British Museum, and several poems, included in his Paradise of Dainty Devices.

Edwards (John), an English divine, and controversial writer, born at Hertford in 1637. His father, Thomas Edwards, was a furious presbyterian, and wrote with equal zeal against the episcopalians and independents; but, when the latter party prevailed, he withdrew to Holland, where he died in 1646. A work of his, entitled Gangræna, exhibits a curious picture of the religious divisions of that period. John received his education first at Merchant Taylor's school, London, and afterwards St. John's College, Cambridge, where he was chosen fellow. He married in 1676, and was soon after presented to the living of St. Peter's, Colchester. Here he continued only about three years, when he removed to Cambridge, took his degree of D.D., and from this time employed himself chiefly in writing. He published a vast number of books, not a few of them practical, but the greater part on controversial subjects. His opinions were Calvinistic. He died in 1716. The most esteemed of his works is his Preacher, in 3 vols.

Edwards (Jonathan), an American divine, was born at Windsor, in Connecticut, in 1703, and educated at Yale College, where he took his degrees in arts. In 1722 he became preacher to a presbyterian congregation at New York; and, in 1724, was chosen tutor of Yale College; which station he resigned in 1726, and removed to Northampton to assist his grandfather, who was minister there. He remained at Northampton till 1750, when he was dismissed from his situation for refusing to administer the sacrament to those who could not give proofs of their conversion. In 1751 he went as a missionary among the Indians, and, in 1757, was elected president of the college of New Jersey, which station he did not long enjoy; for next year, 1758, he was attacked by the small pox, which proved fatal. Mr. Edwards's works demonstrate him to have been an acute metaphysician, and strict Calvinist. He wrote, 1. A Treatise concerning Religious Affections; 2. The Life of David Brainerd, a Missionary; 3. Narrative of the Work of God in the Conversion of many Hundred Souls in Northampton; 4. An Enquiry into the Modern prevailing Notion of that Freedom of Will, which

is supposed to be essential to Moral Agency; 5. The great Doctrine of Original Sin defended; 6. Sermons, &c. &c.

Edwards (Edward), a London artist, of great ingenuity, was born in 1738, and brought up to his father's business of a chair-maker and carver. This he soon quitted for drawing, in which he acquired skill enough to become a teacher, and by that means supported his mother when a widow, and a brother and sister. The society of arts encouraged his efforts by two premiums, for historical pictures, and in 1773 he became an associate of the Royal Academy. He now visited Italy, and on his return was employed by Mr. Horace Walpole, Mr. Hamilton of Bath, and several other gentlemen. In 1788 he became teacher of perspective in the Royal Academy, and in the course of his duties composed his Treatise on Perspective, 4to. He died in 1806: after his death were printed his Anecdotes of Painters, 4to., with his life prefixed.

Edwards (Bryan), a literary gentleman principally known for his History of the West Indies, was born in 1743, at Westbury in Wiltshire. Educated at a private dissenting seminary at Bristol, he acquired on the death of his father the protection of an uncle, of considerable property in Jamaica, and was placed by him under the tuition of a clergyman resident there. Together with the large fortune of his uncle, he inherited that of a Mr. Hume of Jamaica, and, becoming a considerable merchant, returned to England, and took his seat in 1796 for the borough of Grampound, which he represented until his death in July 1800. He published Thoughts on the Trade of the West India Islands with the United States, 8vo. 2. A Speech on the Slave Trade. 3. History of the British Colonies in the West Indies, 2 vols. 4to. and 3 vols. 8vo. 4. The Proceedings of the governor and assembly of Jamaica in regard to the Maroon negroes, 8vo.

Edwards (George), a physician and political writer of respectable literary attainments, left the following productions. The Aggrandisement and National Perfection of Great Britain, 2 vols. 4to., 1787; Royal and Constitutional Regeneration of Great Britain, 2 vols. 4to.; Practical Means of exonerating the public Burthens, and of raising the Supplies of War without new Taxes, 4to., both in 1790; Great and important Discovery of the Eighteenth Century, &c., 8vo.; First Volume of the Franklinian Improvement of Medicine, 4to., both in 1791; Effectual Means of providing against the Distress apprehended from Scarcity, &c., 8vo. 1800; Practical Means of counteracting the present Scarcity, &c., 8vo.; Political Interests of Great Britain, 8vo., both 1801; Peace on Earth, Good will towards Men, &c., 1805, 8vo.; Measures as well as Men, &c. 8vo., 1806; A plain Speech to the Imperial Parliament of Great Britain, 8vo.; Means adequate to the present Crisis, 8vo.; Discovery of the natural Æra of Mankind, all in 1807; and The National Improvement of the British Empire, &c., 1808. Dr. Edwards died at his house in Suffolk Street, February 17th, 1823, in the seventy-second year of his age.

Edwards (Thomas), an English divine, born at Coventry in 1729, and educated at Clare-Hall, Cambridge, of which he became fellow. He printed a translation of the Psalms in 1755, and the year following was chosen master of the grammar-school at Coventry, besides being presented to the rectory of St. John Baptist in that city. In 1759 he published a book, entitled The Doctrine of Irresistible Grace proved to have no Foundation in the New Testament. In 1762 he became the defendant of bishop Hare's System of the Hebrew Metre against Dr. Lowth. He took the degree of D.D. in 1766, and in four years after obtained the living of Nuneaton in Warwickshire, where he died in 1785. Besides the works above noticed, he published Selections from Theocritus, with notes.

Edwards (Thomas), an ingenious writer, born in London in 1709. He was bred to the bar, and became a member of the society at Lincoln's Inn, yet he scarcely ever practised. He attacked Warburton's edition of Shakspeare in 1744, after which he published a very sharp and humorous work, entitled Canons of Criticism, with a Glossary, which went through several editions. He added to this work some sonnets, and an account of the trial of the letter Y. He died in 1757. A tract of his, upon Predestination, was published some time after.

Edwards (William), a selt-taught architect, of Glamorganshire, South Wales, whose name deserves to be recorded on account of the uncommon displays of genius which he has left in that corner of the country. He held only the rank of an ordinary mason, yet, by the superior mental powers with which he was endowed, he acquired remarkable skill in the designing and building of bridges. That over the Taaf, particularly, which is the segment of a circle, the chord of which is 147 feet at the surface of the water, is a monument of his abilities. William Edwards likewise exercised the calling of a methodist preacher. He died in 1789, aged seventy-one.

EDWIN'S Hall, an ancient ruinous building, on Cockburn Law in Berwickshire, so named from Edwin, king of Northumberland, but said to have been originally built by the Picts. It consists of three concentric circles; the diameter of the innermost is forty feet, the wall seven feet thick; the space between the innermost and second wall, seven feet, and that between the second and third, ten feet. The stones are very large, and grooved into each other, having never been cemented with mortar.

EDWY, the son of Edmund I., king of England, succeeded his uncle, Edred, A.D. 955. The tragical history of this unfortunate monarch and his virtuous queen Elgiva, reflects an indelible stain on the character of St. Dunstan, and shows what sort of monsters were canonised as saints in the ages of superstition. See Britain.

EDYSTONE Light-House. See Eddystone.

EECKHOUT (Gerbrant Vander), an historical portrait painter, was born at Amsterdam in 1621, and was a disciple of Rembrandt; whose manner of designing, coloring, and penciling, he imitated so nearly, that it is difficult to distinguish between several of his paintings and those of his

ıster; his touch and his coloring are the same Rembrandt's; but he rather excelled him in e extremities of his figures. His principal ıployment was in portraits; but his chief de- ht was in painting historical subjects, which executed with equal success. His composi- n is rich and full of judgment; the distribution his masses of light and shadow, is truly excel- ıt; and, in the opinion of many connoisseurs, had more transparence in his coloring, and tter expression, than his master. He died in 74.

EEK, *v. a.* Better written EKE, which see.

EEL, *n. s.* Sax. and Swed. æl; Dan. Belg. l Teut. *æl;* Germ. *aal;* Gr. εγκελυς, ab ιλυς, *us*, mud. A slimy, serpentine kind of fish, d in muddy waters.

Is the adder better than the *eel*,
Because his painted skin contents the eye.
Shakspeare.

EEL, in ichthyology. See MURÆNA.

EEL-FISHING. See ANGLING.

EELS, MICROSCOPIC. See ANIMALCULE. The roscopic eels in vinegar are similar to those sour paste. The taste of vinegar was formerly ught to be occasioned by the biting of these le animals, but that opinion has been long ago loded. Mentzelius says, he has observed actual transformation of these little creatures flies; but as this has never been observed any other person, nor is there an instance of h a transformation in any other animalcule, seems probable that Mentzelius has been taken in his observations.

EEL SHEAR, a forked instrument, with three or jagged teeth, used for catching of eels; that ı the four teeth is best, which they strike into mud at the bottom of the river, and if it ke against any eels it never fails to bring n up.

E'EN, *adv.* Contracted from even. See EN.

ays the satyr, if you have a trick of blowing hot cold out of the same mouth, I have *e'en* done you *L'Estrange.*

EFBE, an island near the south coast of sol, in the Eastern Seas, having a bay on its h side, which forms a harbour. It is or six miles in length, and birds of paradise rate, where they are caught with bird-lime, dried as they appear in Europe. Captain est found two small villages here. Long. E., lat. 2° 12′ S

EFF, *n. s.* Commonly written eft. A small d. See EFT.

EFFABLE, *adj.* Lat. *effabilis*. Expressible; rable.

e accommodated thereunto his universal language ake his character *effable*. *Wallis.*

EFFACE, *v. a.* Fr. *effacer*, Lat. *ex* and *facio*, lestroy, or mar the appearance; blot out; e, to destroy, generally; to wear away.

or our admission shall your realm disgrace,
length of time our gratitude *efface*.
Dryden's Æneid.

aracters on dust, the first breath of wind *effaces*.
Locke.

was ordered, that his name should be *effaced* out l publick registers. *Addison on Italy.*

Time, I said, may happily *efface*
That cruel image of the king's disgrace. *Prior.*

Otway failed to polish or refine,
And fluent Shakspeare scarce *effaced* a line.
Pope.

So coin grows smooth, in traffic current passed,
Till Cæsar's image is *effaced* at last. *Cowper.*

Who hath bent him o'er the dead
Ere the first day of death is fled,
The first dark day of nothingness,
The last of danger and distress,
(Before decay's *effacing* fingers
Have swept the lines where beauty lingers).
Byron.

EFFECT', *n. s.* & *v. a.*
EFFECT'IBLE, *adj.*
EFFECT'IVE, *adj.*
EFFECT'IVELY, *adv.*
EFFECT'LESS, *adj.*
EFFECT'OR, *n. s.*
EFFECT'UAL, *adj.*
EFFECT'UALLY, *adv.*
EFFECT'UATE, *v. a.*

Fr. *effect;* Ital. *effetto;* Span. *effetto, effecto;* Port. *effeito;* Lat. *effectus, e* expletive, and *facio*, to make. That which is produced by a real or supposed cause; completion; reality: hence, in the plural, palpable and moveable property; hence also consequence or event accomplished or proposed; success; advantage: as a verb to bring to pass; produce; cause; particularly as an agent. Effectible means, that may be accomplished; practicable: effective is, having the power to accomplish objects or effects: efficient is, serviceable: effectless, useless; impotent: effector, he who produces an effect, applied to the First Cause: effectual is, actually productive of effects; practically operative of them: to effectuate, derived to us from the Fr. *effectuer*, is synonymous with to effect.

They spake to her to that *effect*. 2 *Chron.*

Christ is become of no *effect* unto you.
Gal. v. 4.

The communication of thy faith may become *effectual*, by the acknowledging of every good thing.
Philem. 6.

I have the taught division betwene
Frende of *effecte*, and frende of countinuance,
Chaucer.

In shew, a marvellous indifferently composed senate ecclesiastical was to govern, but in *effect* one only man should, as the spirit and soul of the residue, do all in all. *Hooker.*

The reading of scripture is *effectual*, as well to lay even the first foundation, as to add degrees of farther perfection, in the fear of God. *Id.*

What form of prayer
Can serve my turn? Forgive me my foul murther!
That cannot be, since I am still possest
Of those *effects* for which I did the murther,
My crown, mine own ambition, and my queen.
Shakspeare

I'll chop off my hands;
In bootless prayer have they been held up,
And they have served me to *effectless* use. *Id.*

Reprove my allegation, if you can;
Or else conclude my words *effectual*. *Id.*

No man, in *effect*, doth accompany with others, but he learneth, ere he is aware, some gesture, or voice, or fashion. *Bacon's Natural History.*

They are not *effective of* any thing, nor leave no work behind them. *Bacon.*

Being consul, I doubt not t' *effect*
All that you wish. *Ben Jonson.*

Though the means cannot *effect* that which we desire; yet God will have us use the likeliest means on our part to *effect* it. *Bp. Hall. Contemplations.*

If either the curses of men, or the endeavours of the powers of darkness, should be *effectual*, all would be hell. *Id.*

Anger is the most impotent passion that accompanies the mind of man; it *effects* nothing it goes about. *Clarendon.*

He should depart only with a title, the *effect* whereof he should not be possessed of, before he deserved it. *Id.*

That a pot full of ashes will still contain as much water as it would without them, is not *effectible* upon the strictest experiment. *Browne's Vulgar Errours.*

Nor do they speak properly who say that time consumeth all things; for time is not *effective*, nor are bodies destroyed by it. *Id.*

If a mischief become public and great, acted by princes, and *effected* by armies, and robberies be done by whole fleets, it is virtue, and it is glory. *Bp. Taylor.*

Whosoever is an *effective* real cause of doing his neighbour wrong is criminal, by what instrument soever he does it. *Taylor.*

If any mystery, rite, or sacrament, be *effective of* any spiritual blessings, then this much more, as having the prerogative and principality above every thing else. *Id.*

This *effectively* resists the devil, and suffers us to receive no hurt from him. *Taylor's Rule of Holy Living.*

Recovering shankers, crystallines,
And nodes and blotches in their rinds,
Have no *effect* to operate
Upon that duller block your pate? *Hudibras.*

State and wealth, the business and the crowd,
Seem at this distance but a darker cloud;
And is to him, who rightly things esteems,
No other in *effect* than what it seems. *Denham.*

The change made of that syrup into a purple color, was *effected* by the vinegar. *Boyle on Colours.*

We commemorate the creation, and pay worship to that infinite Being who was the *effector* of it. *Derham.*

The students of nature, conscious of her more cryptick ways of working, resolve many strange *effects* into the near efficiency of second causes. *Glanville. Apology.*

The institution has hitherto proved without *effect*, and has neither extinguished crimes, nor lessened the number of criminals. *Temple.*

You may see by her example, in herself wise, and of others beloved, that neither folly is the cause of vehement love, nor reproach the *effect*. *Sidney.*

He found means to acquaint himself with a nobleman, to whom discovering what he was, he found him a fit instrument to *effectuate* his desire. *Id.*

Effect is the substance produced, or simple idea introduced into any subject, by the exerting of power. *Locke.*

These men's opinions are not the product of judgment, or the consequence of reason; but the *effects* of chance and hazard, of a mind floating at all adventures, without choice, and without direction. *Id.*

Sometimes the sight of the altar, and decent preparations for devotion, may compose and recover the wandering mind more *effectually* than a sermon. *South.*

I took pleasure to trace out the cause of *effects*, and the dependence of one thing upon another in the visible creation. *Burnet's Theory.*

Semblant art shall carve the fair *effect*,
And full achievement of thy great designs. *Prior.*

To say of a celebrated piece that there are faults in it, is, in *effect*, to say that the author of it is a man. *Addison*

We see the pernicious *effects* of luxury in the ancient Romans, who immediately found themselves poor as soon as this vice got footing among them. *Addison on Italy.*

The emperor knew that they could not convey away many of their *effects*. *Id. Spectator.*

A subject of that vast latitude, that the strength of one man will scarcely be sufficient *effectually* to carry it on. *Woodward.*

A fatal instance of this in our first parents we have upon sacred record; the unhappy *effects* of which are but too visible in all. *Mason.*

The morality of an action depends upon the motive from which we act. If I fling half a crown to a beggar with intention to break his head, and he picks it up and buys victuals with it, the physical *effect* is good; but, with respect to me, the action is very wrong. *Johnson.*

This idea he immediately carried into *effect*, by fixing a bar of iron of the depth he wanted along each side of the keel, moving upon hinges that admitted of being moved in one direction, but which could not be bent back in the opposite direction. *Franklin.*

A true artist should put a generous deceit on the spectators, and *effect* the noblest designs by easy methods. *Burke.*

EFFEM'INATE, *adj.*, *v. a.*, *v. n.* [& *n. s.* Fr. *effeminé*; Ital. *effeminato*; Span. and Port. *effeminedo*; Lat. *effœminatus*, *effœmino*; *e*, expletive, and *fœmina*, a woman. Womanish; unmanly; tender; nice; voluptuous. The verb seems to have been derived, in our language, from the adjective.

EFFEM'INACY, *n. s.*

EFFEM'INATELY, *adv.*.

EFFEM'INATENESS, *n. s.*

EFFEMINA'TION.

Know ye not that the unrighteous shall not inherit the kingdom of God? Be not deceived: neither fornicators, nor *effeminate*. *Bible.* 1 *Cor.* vi. 9.

The king, by his voluptuous life and mean marriage, became *effeminate*, and less sensible of honour. *Bacon.*

After the slaughter of so many peers,
Shall we at last conclude *effeminate* peace? *Shakspeare.*

As well we know your tenderness of heart,
And gentle, kind, *effeminate* remorse. *Id.*

Vices the hare figured; not only feneration, or usury, from its fecundity and superfetation, but degenerate *effemination*. *Browne's Vulgar Errours.*

From man's *effeminate* slackness it begins,
Who should better hold his place. *Milton.*

But foul *effeminacy* held me yoked
Her bond slave: O indignity, O blot
To honour and religion! *Id. Agonistes.*

What boots it at one gate to make defence,
And at another to let in the foe
Effeminately vanquished? *Milton.*

So long as idleness is quite shut out from our lives, all the sins of wantonness, softness, and *effeminacy* are prevented. *Taylor.*

The more *effeminate* and soft his life,
The more his fame to struggle to the field. *Dryden.*

Poetry—not being an art of lies—not of *effeminateness*, but of notable stirring courage. *Sidney.*

It weakens and *effeminates* their minds to suffer them to complain; and if they endure sometimes crossing or pain from others, without being permitted to think it strange or intolerable, it will do them no harm to learn sufferance, and harden them early. *Locke.*

In a slothful peace both courage will *effeminate* and manners corrupt. *Pope.*

And I can feel
Thy follies too; and with a just disdain
Frown at *effeminates*, whose very looks
Reflect dishonour on the land I love. *Cowper.*

But that *effeminacy*, folly, lust,
Enervate and enfeeble, and needs must;
And that a nation shamefully debased
Will be despised and trampled on at last,
Unless sweet Penitence her powers renew,
Is truth, if history itself be true. *Id.*

'I offer you a handsome suit of clothes:
'A woman's, true: but then there is a cause
'Why you should wear the'—'What though my soul loathes
'The *effeminate*?'—Thus, after a short pause,
Sighed Juan, muttering also some slight oaths,
'What the devil shall I do with all this gause?' *Byron.*

EFFENDI, in the Turkish language, signifies master; and accordingly it is a title very extensively applied; as to the mufti and emirs, to the priests of mosques, to men of learning, and of the law. The grand chancellor of the empire is called reis effendi.

EFFERVESCE,' *v. n.* } Lat. *effervesco;*
EFFERVES'CENCE, *n. s.* } *efferveo, e* and *fer-*
EFFERVES'CENT, *adj.* } *veo*, to burn. To rise in chemical ebullition: to generate heat by intestine motion.

Take chalk, ignite it in a crucible, and then powder it: put it into strong spirit of nitre, 'till it becomes sweetish, and makes no *effervescence* upon the injection of the chalk. *Grew.*

The compound spirit of nitre, put to oil of cloves, will *effervesce* even to a flame. *Mead on Poisons.*

Hot springs do not owe their heat to any colluctation or *effervescence* of the minerals in them, but to subterranean heat or fire. *Woodward's Natural History.*

In the chemical sense, *effervescence* signifies an intestine motion, produced by mixing two bodies together that lay at rest before; attended sometimes with a hissing noise, frothing and ebullition. *Arbuthnot on Aliments.*

We have an agreeable imitation of acidulous waters, under the term of what is called the *effervescing* draught. This consists of two solutions, one of an alkaline carbonate, and the other of the citric or some other vegetable acid, which are directed to be mixed together, and swallowed during the act of *effervescence*. *Dr. A. Rees.*

EFFERVESCENCES are commonly attended with bubbles, vapors, small jets of the liquid, &c., occasioned by the air which then disengages itself. Sometimes, also, they are accompanied with a great degree of heat, the cause of which is not so well known. Formerly the word fermentation was also applied to effervescences; but now that word is confined to the motion naturally excited in animal and vegetable matters, and from which new combinations among their principles take place.

EFFETE',*adj.* Lat. *effætus*, (*e* privative, young). Barren; and *fæto*, to bear young; disabled from producing young; worn out.

All that can be allowed him now, is to refresh his decrepit, *effete* sensuality, with the history of his former life. *South.*

In most countries the earth would be so parched and *effete* by the drought, that it would afford but one harvest. *Bentley.*

EFFICA'CIOUS, *adj.* } Old Fr. *efficaise*,
EFFICA'CIOUSLY, *adv.* } power; Lat. *efficax*,
EF'FICACY, *n. s.* } *efficacis*, from *efficio*, to EFFECT, which see. Powerful; productive of intended objects or consequences.

Whatsoever is spoken concerning the *efficacy* or necessity of God's word, they tie and restrain only into sermons. *Hooker.*

Whether if they had tasted the tree of life before that of good and evil, they had suffered the curse of mortality; or whether the *efficacy* of the one had not overpowered the penalty of the other, we leave it unto God. *Browne.*

Efficacy is a power of speech which represents a thing, by presenting to our minds the lively ideas or forms. *Peacham.*

If we find that any other body strikes *efficaciously* enough upon it, we cannot doubt but it will move that way in which the striking body impels it. *Digby on Bodies.*

The apostle tells us of the success and *efficacy* of the gospel upon the minds of men; and, for this reason, he calls it the power of God unto salvation. *Tillotson.*

A glowing drop with hollowed steel
He takes, and, by one *efficacious* breath,
Dilates to cube or square. *Philips.*

The arguments drawn from the goodness of God, have a prevailing *efficacy* to induce men to repent. *Rogers.*

Bad as the world is, there is reason to think it would be a thousand times worse, if it were not for this institution; the wisdom and humanity of which can never be sufficiently admired; and which, if it were as strictly observed as it is positively commanded, would operate with singular *efficacy* in advancing public prosperity, as well as private virtue. *Beattie.*

EFFI'CIENCE, *n. s.* } Lat. *efficio*. See
EFFI'CIENCY, } EFFICACIOUS. Act or
EFFI'CIENT, *adj.* & *n. s.* } power of producing
EFFI'CIENTLY, *adv.* } effects or consequences; agency: as a substantive, efficient is synonymous with causer, or with effector.

The manner of this divine *efficiency* being far above us, we are no more able to conceive by our reason, than creatures unreasonable by their sense are able to apprehend after what manner we dispose and order the course of our affairs. *Hooker.*

God, which moveth meer natural agents as an *efficient* only, doth otherwise move intellectual creatures, and especially his holy angels. *Id.*

Observations of the order of nature carry the mind up to the admiration of the great *efficient* of the world. *Hale.*

That they are carried by the manuduction of a rule, is evident; but what that regulating *efficiency* should be, is not easily determined. *Glanville.*

A pious will is the means to enlighten the understanding in the truth of Christianity, upon the account of a natural *efficiency*: a will so disposed, will engage the mind in a severe search. *South.*

Logical or consequential necessity is when a thing does not *efficiently* cause an event but yet by certain infallible consequences does infer it. *South.*

Gravity does not proceed from the *efficiency* of any contingent and unstable agents; being entirely owing to the direct concourse of the power of the Author of nature. *Woodward.*

Your answering in the final cause, makes me believe you are at a loss for the *efficient.* *Collier on Thought.*

I look upon indolence as a sort of suicide; for the man is *efficiently* destroyed, though the appetite of the brute may survive. *Chesterfield.*

EFFIG'IATE, *v. a.* EFFIGIA'TION, *n. s.* EF'FIGIES, *n. s.* EF'FIGY. Lat. *effigio*, (*e*, and *fingo*, to fashion). To form into resemblance; to image: effigies or effigy is resemblance, generally of a rough, uncouth, or of the French caricature kind: but our older writers use these words more seriously, and for 'actual image,' or idea.

We behold the species of eloquence in our minds, he *effigies* or actual image of which we seek in the organs of our hearing. *Dryden's Dufresnoy, Preface.*

Observe those numerous wrongs in *effigy*,
The gods have saved from the devouring sea. *Garth.*

EFFIGY is also used for the print or impression of a coin, representing the prince's head who struck it.

EFFIGY, TO EXECUTE OR DEGRADE IN, denotes the execution or degradation of a condemned criminal, who cannot be apprehended. In France, before the revolution, they used to hang a picture on a gibbet, wherein was represented the criminal, with the manner of punishment; at the bottom was written the sentence of condemnation. Those who were sentenced to death were executed in effigy.

EFFINGHAM, a county of the United States, in the lower district of Georgia, bounded by the Savannah River on the north-east, which separates it from South Carolina, and by the Ogeechee River on the south-west, which divides it from Liberty county. Chief towns, Ebenezer and Elberton.

EFFINGHAM, a township of New Hampshire, in Stafford county, seated on the Ossipee, south-east of Ossipee Pond.

EFFLORES'CENCE, *n. s.* EFFLORES'CENCY, EFFLORES'CENT, *adj.* Lat. *effloresco*, *e* expletive, and *floreo*, to flower; from *flos*, *floris*, a flower. The production of flowers; hence any excrescence of the shape or appearance of flowers.

Where there is less heat, there the spirit of the plant is digested, and severed from the grosser juice in *efflorescence.* *Bacon.*

Excrescencies in the form of flowers.

Two white sparry incrustations, with *efflorescencies* in form of shrubs, formed by the trickling of water. *Woodward.*

Yellow *efflorescent* sparry incrustations on stone. *Id.*

It has lately been found in large quantities in a natural bason of calcareous earth at Molfetta in Italy, both in thin strata between the calcareous beds, and in *efflorescences* of various beautiful leafy and hairy forms. *Darwin.*

A wart beginneth in the cutis, and seemeth to be an *efflorescence* of the serum of the blood. *Wiseman's Surgery.*

EFFLORESCENCE, in chemistry, denotes the formation of a kind of mealy powder on the surface of certain bodies. Efflorescence is occasioned either by decomposition or drying. The efflorescence which happens to cobalt and pyrites is of the first; and that observed on the crystals of marine alkali, Glauber's salt, &c., of the latter kind. An efflorescence is sometimes also a species of crystallisation, the nature of which is not well understood; as the beautiful vegetations which shoot up from vitriolated tartar, acidulated either with the vitriolic or nitrous acids, the saline spiculæ, which are observed to shoot from salt butter, &c. Besides the common crystallisation of salts, all of them have the property of appearing in the form of an efflorescence, or small saline spiculæ, when mixed with any thick substance, particularly lime. Whatever salt happens to be made use of, there is little or no difference in the efflorescence. Thus, in butter very much salted, the sea-salt shoots in the form of long spiculæ, though the sea-salt itself never shoots but in the form of cubical crystals. In like manner, Glauber's salt will appear in the form of an efflorescence, as well as the fossile alkali, &c., nor will the form of the crystals of the efflorescence be perceptibly different from those of sea-salt. The efflorescences which we see very commonly upon walls, are in general Glauber's salt. In some cases, they are composed of fossile alkali. The reason of these differences is not known. In almost all cases of this kind there seems to be a real growth of salt. On one spot of a plaster wall, about two feet square, which we observed particularly, this growth was very evident. The produce was a true Glauber's salt; and, by frequently taking off the efflorescence, eight ounces were procured; nor did the prolific virtue of the wall seem to be in the least impaired by the waste.

EFFLORESCENTIA, or rather EFFLORESCENTIÆ TEMPUS, in botany, from effloresco, to bloom, the precise time of the year and month in which every plant shows its first flowers.

EF'FLUENCE, *n. s.* EF'FLUX, *n. s.* & *v. n.* EFFLUX'ION, *n. s.* Fr. *flux*; Lat. *effluo*, *effluxus*; from *e*, out of, and *fluo*, *fluxus*, to flow. A flowing forth: that which flows; emanation. Or, as Dr. Johnson observes, the act of flowing is more properly effluence, that which flows more properly efflux.

There are some light *effluxions* from spirit to spirit, when men are one with another; as from body to body. *Bacon.*

The first *efflux* of men's piety, after receiving of the faith, was the selling and consecrating their possessions. *Hammond.*

By *effluxion* and attraction bodies tend towards the earth. *Browne.*

These scintillations are not the ascension of the air upon the collision of two hard bodies, but rather the inflammable *effluences* discharged from the baches collided. *Id.*

Bright *effluence* of bright essence increate. *Milton.*

Five thousand and some odd centuries of years re *effluxed* since the creation.
Boyle's Seraphick Love.

Through the copious *efflux* of matter, through the rifice of a deep ulcer, he was reduced to a skeleton.
Harvey.

From the bright *effluence* of his deed
Th. y borrow that reflected light,
With which the lasting lamp they feed,
Whose beams dispel the damps of envious night.
Prior.

Prime chearer, light!
Of all material beings, first and best!
Efflux divine! *Thomson's Summer.*

EFFLU'VIUM, *n. s. sing.* } Lat. *effluo.* See
EFFLU'VIA, *n. s. plur.* } EFFLUENCE.
mall particles that exude, i.e. flow as it were, om bodies, commonly applied in modern times the smell or scent they yield.

If the earth were an electrick body, and the air but e *effluvium* thereof, we might believe that, from action, and by effluxion, bodies tended to the earth.
Browne.

Neither the earth's diurnal revolution upon its axis, r any magnetick *effluvia* of the earth, nor the air, atmosphere which environs the earth, can produce avity. *Woodward.*

If these *effluvia*, which do upward tend,
Because less heavy than the air, ascend;
Why do they ever from their height retreat,
And why return to seek their central seat?
Blackmore.

EFFO'RCE, *v. a.* Fr. *efforcer.* To force; break through by violence; strain; violate.

all that room was nothing to be seen,
But huge great iron chests and coffers strong;
ll barred with double bonds, that ne'er could ween,
Them to *efforce* by violence or wrong.
Faerie Queene.

Then 'gan her beauty shine as brightest sky,
And burnt his beastly heart t' *efforce* her chastitie.
Spenser.

The palmer lent his ear into the noise,
To wheet who called so importunely;
Again he heard a more *efforced* voice,
That bade him come in haste. *Id.*

EF'FORM, *v. a.* } Latin, *efformo.* To
EFFORMA'TION, *n. s.* } make in any certain anner; to shape; to fashion.

Nature begins to set upon her work of *efformation.*
More.

Merciful and gracious, thou gavest us being, raising from nothing, and *efforming* us after thy own image
Taylor.

They pretend to solve phenomena, and to give an count of the production and *efformation* of the uniirse. *Ray.*

EFF'ORT. Fr. *effort;* most probably from ie Latin *fortis*, strong, bold. Struggle; earnest deavour; vehement action. It is accented by od writers on either syllable.

If, after having gained victories, we had made the me *efforts* as if we had lost them, France could not ave withstood us.
Addison. On the State of the War.

Though the same sun, with all diffusive rays,
Blush in the rose, and in the diamond blaze,
We prize the stronger *effort* of his power,
And always set the gem above the flower. *Pope.*
Blackmore himself for any grand *effort.* *Id.*

There is not so poor a book in the world, that would not be a prodigious *effort* were it wrought out entirely by a single mind, without the aid of prior investigators
Johnson.

And bathing his chill temples tried to sooth
Each pulse to animation, till beneath
Its gentle touch and trembling care, a sigh
To these kind *efforts* made a low reply. *Byron.*

Good without *effort*, great without a foe. *Id.*

EFFO'SION, *n. s.* Lat. *effodio.* The act of digging up from the ground: deterration.

He set apart annual sums for the recovery of manuscripts, the *effosion* of coins, and the procuring of mummies. *Arbuthnot.*

EFFRA'IABLE, *adj.* Fr. *effroyable.* Dreadful; frightful; terrible. A word not used.

Pestilential symptoms declare nothing a proportionate efficient of their *effraiable* nature but arsenical fumes. *Harvey.*

EFFRONTERY. Fr. *effronterie*; Lat. *effrons*, shameless; from *frons, frontis*, the forehead, often put for impudence or assurance (from modest females wearing it veiled). Shamelessness; immodesty: contempt of reproach.

They could hardly contain themselves within one unworthy act, who had *effrontery* enough to commit or countenance it. *King Charles.*

A bold man's *effrontery*, in company with women, must be owing to his low opinion of them, and his high one of himself. *Clarissa.*

Others with ignorance and insufficiency have self-admiration and *effrontery* to set up themselves.
Watts.

His pride, that scorns to obey or to submit,
With them is courage, his *effrontery* wit.
Cowper.

EFFULGE', *v. n.* } Lat. *effulgeo*, to shine
EFFUL'GENCE, *n. s.* } out, from *e*, out of, and
EFFUL'GENT, *adj.* } *fulgeo* to shine. To emit light, lustre. Effulgence is the lustre, light, or brightness, emitted.

On thee
Impressed, the *effulgence* of his glory abides.
Milton.

Thy lustre, blest *effulgence*, can dispel
The clouds of error, and the gloom of hell.
Blackmore.

How soon the *effulgent* emanations fly
Through the blue gulf of interposing sky! *Id.*

The downward sun
Looks out *effulgent*, from amid the flash
Of broken clouds. *Thomson's Spring*

The topaz charms the sight,
Like these *effulging* yellow streams of light.
Savage.

The west is indeed on fire with his descending glories. In what broad and *effulgent* day do they reveal the infatuation of the duke of Bedford; sharpening the axe for his own neck, and for the necks of all men of rank and property in the kingdom! *Seward.*

Effulgent maids! you round deciduous day,
Tressed with soft beams, your glittering bands array.
Darwin.

EFFUMABI'LITY, *n. s.* Lat. *fumus.* The quality of flying away, or vaporing in fumes. A useful word, but not adopted.

They seem to define mercury by volatility, or, if I may coin such a word, *effumability.* *Boyle.*

EFFUSE', *v. a.* & *n. s.* } Fr. *effusion*, Ital.
EFFU'SION, *n. s.* } Span. and Portug.
EFFU'SIVE, *adj.* } *effusione*; Lat. *effusio*, from *effundo*, to pour out, i. e. *e*, out, and *fundo*, to pour. To pour out; shed; spill. Shakspeare uses effuse for effusion. The act of pouring out words or things; the thing poured out.

When there was but as yet one only family in the world, no means of instruction, human or divine, could prevent *effusion* of blood. *Hooker.*

My heart hath melted at a lady's tears,
Being an ordinary inundation;
But this *effusion* of unmanly drops,
This shower, blown up by tempest of the soul,
Startles mine eyes, and makes me more amazed.
Shakspeare.

The air hath got into my deadly wounds,
And much *effuse* of blood doth make me faint. *Id.*

Stop *effusion* of our Christian blood,
And 'stablish quietness. *Id. Henry VI.*

Purge me with the blood of my Redeemer, and I shall be clean; wash me with that precious *effusion*, and I shall be whiter than snow. *King Charles.*

Such great force the gospel of Christ had upon men's souls, melting them into that liberal *effusion* of all that they had. *Hamm. on Fundam.*

He fell, and, deadly pale,
Groaned out his soul, with gushing blood *effused.*
Milton.

Our blessed Lord commanded the representation of his death, and sacrifice on the cross, should be made by breaking bread and *effusion* of wine.
Taylor's Worthy Communicant.

Yet shall she be restored, since public good
For private interest ought not be withstood,
To save the *effusion* of my people's blood.
Dryden's Homer.

If the flood-gates of heaven were any thing distinct from the forty days rain, their *effusion*, 'tis likely, was at this same time when the abyss was broken open. *Burnet's Theory.*

At last emerging from his nostrils wide,
And gushing mouth, *effused* the briny tide.
Pope's Odyssey.

The North-east spends its rage; the *effusive* South
Warms the wide air. *Thomson's Spring.*

The several irruptions of Arabs, Tartars, and Persians, into India were, for the greater part, ferocious, bloody, and wasteful in the extreme: our entrance into the dominion of that country was as generally, with small comparative *effusion* of blood; being introduced by various frauds and delusions, and by taking advantage of the incurable, blind, and senseless animosity, which the several country powers bear towards each other, rather than by open force. *Burke.*

Your myriad trains o'er stagnant oceans tow,
Harnessed with gossamer, the loitering prow;
Or with fine films, suspended o'er the deep,
Or oil *effusive* lull the waves asleep. *Darwin.*

EFFUSION, or FUSION, in astronomy, denotes that part of the sign Aquarius, represented on celestial globes and planispheres, by the water issuing out of the urn of the water-bearer.

EFT, *n. s.* Sax. efeta, from Goth. *vate*, water. A water-lizard.

Peacocks are beneficial to the places where they are kept, by clearing of them from snakes, adders, and *efts*, upon which they will live.
Mortimer's Husbandry.

The crocodile of Egypt is the lizard of Italy, and the *eft* in our country. *Nicholas.*

EFT, in zoology. See LACERTA.

EFT, *adv.* } Sax. eft, and eftona, from
EFTSOONS.' } Sax. eftan, to hasten. Soon; quickly; following soon. The Goth. *eft* signifies behind; and our naval word aft, as well as after, afterwards, &c., are of the same family. See AFT.

But sithen thynges passed cannot be gaine called, muche oughte wee the more beware, by what occasion we haue taken soo greate hurt afore, that we *eftesoones* fall not in that occasion agayne. *Sir T. More.*

Eft through the thick they heard one rudely rush,
With noise whereof he from his lofty steed
Down fell to ground, and crept into a bush,
To hide his coward head from dying dread.
Faerie Queene.

Eftsoones he gan apply relief
Of salves and medicines. *Id.*

He in their stead *eftsoones* placed Englishmen, who possessed all their lands. *Spenser's State of Ireland.*

The Germans deadly hated the Turks, whereof it was to be thought that new wars should *eftsoones* ensue. *Knolles's History.*

Quite consumed with flame,
The idol is of that eternal maid;
For so at least I have preserved the same,
With hands profane, from being *eft* betrayed.
Fairfax.

Eftsoons, O sweetheart kind, my love repay,
And all the year shall then be holiday.
Gay's Pastorals.

EGALITE', Fr. i. e. equality; the surname assumed by Philip Bourbon Capet, the last duke of Orleans, to ingratiate himself with the republicans, upon the abolition of monarchy in France, in August, 1792. Neither this piece of policy, however, nor his voting for the death of his unfortunate relation, Louis XVI., could save him from being denounced as a conspirator against the liberty of the republic, on the 12th April, 1793, and condemned to be guillotined on the 6th November following. He was executed accordingly at five P. M., three hours after his condemnation.

EGBERT, the first king of all England, and the last of the Saxon heptarchy. He was a descendant of the royal family of Wessex, and a prince of great accomplishments; but, while young, he was obliged to withdraw to France, where he lived at the court of Charlemagne, till Brithric, the then king of Wessex, from whose jealousy he had fled, became obnoxious to the nobility, through the conduct of his queen. Egbert, who, during his exile, had acquired both the arts of war and government, was recalled to take possession of the kingdom, to which he was legal heir; was proclaimed king of Wessex in 800, and in 802 he united all the other kingdoms under him, giving the whole the name of England. In about five years after, his dominions were twice invaded by the Danes, with great force, but he defeated them in both their attempts. He died in 838, and was succeeded by Ethelwolf. See ENGLAND.

EGEDE (Hans), a Danish missionary, who went to Greenland in 1721. He became the founder of an establishment there, over which he presided for fifteen years, and was the author of a work on the topography and natural history of Greenland, published in Danish in 1729, and afterwards translated into French and Dutch.

He died in 1758, aged seventy-one, in the isle of Walster.

EGEDE (Paul), son of the preceding, was his assistant in the above mission; and published a journal of his own residence in Greenland, from 1721 to 1788. He died at the age of eighty-one, June 3d, 1789.

EGENOTISO, an island in the Eastern Indian Sea, about twenty miles in circumference, fifty miles from the north-east coast of Sumatra. Long. 104° 45′ E., lat. 0° 27′ S.

E'GER, *n. s.* See EAGRE. An impetuous or irregular flood or tide.

From the peculiar disposition of the earth at the bottom, wherein quick excitations are made, may arise those *egers* and flows in some estuaries and rivers; as is observable about Trent and Homber in England.
Browne's Vulgar Errours.

EGER, a river rising in Suabia, which passes by Nordlingen, and runs into the Wernitz, six miles north of Donauwert.

EGER, a large river of Franconia, which flows eastward to Bohemia, and falls into the Elbe.

EGER, an old fortified town of Bohemia, on the above river. It contains some manufactures; has three annual fairs; and in the neighbourhood is a well-known chalybeate spring. It was occupied by the French in 1742, but retaken the following year. It suffered greatly by fire in 1809. Population about 8000. Seventy-six miles from Prague.

EGERIA, or ÆGERIA, a nymph held in great veneration by the Romans. She was courted by Numa Pompilius; and, according to Ovid, became his wife. This prince, to give his laws the greater authority, solemnly declared, before the Roman people, that they were previously sanctified and approved by the nymph Egeria. Ovid says, that Egeria was so disconsolate at the death of Numa, that she melted into tears, and was changed into a fountain by Diana. She was ranked as a goddess who presided over the pregnancy of women, whence some reckoned her the same with Lucina.

EGERTON (John), an eminent prelate, born in London in 1721, was the son of Henry Egerton, bishop of Hereford. He received the first part of his education at Eton, after which he was sent to Oriel College, Oxford. In 1745 he obtained the living of Ross in Herefordshire, and the next year a prebend in the cathedral of Hereford. He was preferred to the deanery of Hereford in 1750, and afterwards successively to the bishoprics of Bangor, Litchfield, and Durham. He was a liberal contributor to several important public works in his diocese, and his charities were extensive. He published several sermons on public occasions; and died in 1787.

EGERTON (Thomas), lord chancellor of England, under James I., was the natural son of Sir Richard Egerton, in Cheshire, and was born about 1540. He was educated at Oxford, whence he removed to Lincoln's Inn. He received the honor of knighthood, and was made attorney-general in 1592; and not long after, master of the rolls, which was followed by the office of lord-keeper. In 1603 he was appointed lord chancellor, with the title of baron Ellesmere; and in 1616 he was created viscount Brackley, but died the year following. His Privileges and Prerogatives of the High Court of Chancery, and his Observations concerning the Office of Lord Chancellor, were published after his death.

EGERTON (Francis), duke of Bridgewater, descended from the above nobleman, was born in 1736, being the fifth son of the first duke, and the third who held that title. He succeeded his elder brother in 1748. This nobleman exhibited a most enlightened and persevering spirit in his various schemes for making navigable canals for the advantage of his estates in Lancashire and Cheshire, and in his patronage of the celebrated Brindley, by whom his plans were executed. The duke had the satisfaction of witnessing the entire success of his undertakings, prior to his death, which took place in 1803.

EGEST', *v. a.* } Lat. *egero*, *egestum*, from
EGEST'ION, *n. s.* } *e*, out, and *gero*, to bear: to carry forth. To evacuate food naturally.

Divers creatures sleep all the Winter; as the bear, the hedge-hog, the bat, and the bee; these all wax fat when they sleep, and *egest* not.
Bacon's Natural History.

The animal soul or spirits manage as well their spontaneous actions, as the natural or involuntary exertions of digestion, *egestion*, and circulation.
Hale's Origin of Mankind.

EGG. Isl. *eggia*, to incite; Sax. eggian; Dan. *egge*: according to Minsheu all derived from Lat. *ago*, to compel, do, &c.

Study becomes pleasant to him who is pursuing his genius, and whose ardour of inclination *eggs* him forward, and carrieth him through every obstacle.
Durham's Physico-Theology.

EGG, *n. s.* Goth. and Swed. *egg*; Sax. œg; Erse. *ough*; perhaps from the foregoing verb, i. e. that which is excited to life by hatching.

About her commeth all the world to begge.
He asketh lande, and he to pas would bryng,
This toye and that, and all not worth an *egge*:
He would in loue prosper aboue all thyng.
Sir T. More.

Therefore think him as the serpent s *egg*,
Which hatched, would, as his kind, grow mischievous.
Shakspeare.

An *egg* was found having lain many years at the bottom of a moat, where the earth had somewhat overgrown it; and this *egg* was come to the hardness of a stone, and the colors of the white and yolk perfect.
Bacon.

Hear this then, ye careless ostriches, that leave your *eggs* in the open sand for the sun to hatch, without the fear of any hoof that may crush them in pieces.
Bp. Hall.

There was taken a great glass-bubble with a long neck, such as chemists are wont to call a philosophical *egg*.
Boyle.

Every insect of each different kind,
In its own *egg*, cheered by the solar rays,
Organs involved and latent life displays. *Blackmore.*

As true wit generally consists in the resemblance and congruity of ideas, false wit chiefly consists in the resemblance and congruity sometimes of single letters, as in anagrams, chronograms, lipograms, and acrostics: sometimes of words, as in puns and quibbles: and sometimes of whole sentences or poems, cast into the figures of *eggs*, axes, or altars. *Addison.*

The Aphis is in a similar manner hatched from an *egg* in the vernal months, and produces a viviparous offspring without sexual intercourse for nine or ten successive generations; and then the progeny is both male and female, which cohabit, and from these new females are produced *eggs*, which endure the winter; the same process probably occurs in many other insects. *Darwin.*

And now the day of woe drew on apace,
A day of woe to all the pigmy race,
When dwarfs were doomed, but penitence was vain,
To rue each broken *egg*, and chicken slain. *Beattie.*

She and her maid, had promised by day-break
To pay him a fresh visit, with a dish
For breakfast, of *eggs*, coffee, bread, and fish. *Byron.*

Egg, in physiology, a body formed in certain females, in which is contained an embryo, or fœtus of the same species, under a cortical surface or shell. The exterior part of an egg is the shell; which in a hen, for instance, is a white, thin, and friable cortex, including all the other parts. It is lined every where with a very thin, but a pretty tough membrane, which dividing at, or very near, the obtuse end of the egg, forms a small bag, where nothing but air is contained. In new-laid eggs this follicle appears very little, but becomes larger when the egg is kept. Within this are contained the albumen, or white, and the vitellus, or yolk; each of which have their different virtues. The albumen is a cold, viscous, white liquor in the egg, different in consistence in its different parts. It is observed, that there are two distinct albumens, each of which is enclosed in its proper membrane. Of these one is very thin and liquid; the other is more dense and viscous, and of a somewhat whiter color; but in old and stale eggs, after some days incubation, inclining to a yellow. As this second albumen covers the yolk on all sides, so it is itself surrounded by the other external liquid. The albumen of a fecundated egg, is as sweet and free from corruption, during all the time of incubation, as it is in new laid eggs; as is also the vitellus. As the eggs of hens consist of two liquors separated one from another, and distinguished by two branches of umbilical veins, one of which goes to the vitellus, and the other to the albumen; so it is very probable, that they are of different natures, and consequently appointed for different purposes. When the vitellus grows warm with incubation, it becomes more humid, and like melting wax or fat, whence it takes up more space. For as the fœtus increases, the albumen insensibly wastes away and condenses; the vitellus, on the contrary, seems to lose little or nothing of its bulk when the fœtus is perfected, and only appears more liquid and humid when the abdomen of the fœtus begins to be formed. The chick in the egg is first nourished by the albumen, and when this is consumed, by the vitellus, as with milk. If we compare the chalazæ to the extremities of an axis passing through the vitellus, which is of a spherical form, this sphere will be composed of two unequal portions, its axis not passing through its centre; consequently, since it is heavier than the white, its smaller portion must always be uppermost in all positions of the egg. The yellowish white round spot, called cicatricula, is placed on the middle of the smaller portion, and therefore always appears on the superior part of the vitellus. Not long before the exclusion of the chick, the whole yolk is taken into its abdomen; and the shell, at the obtuse end of the egg, frequently appears cracked some time before the exclusion of the chick. The chick is sometimes observed to perforate the shell with its beak. After exclusion, the yolk is gradually wasted, being conveyed into the small guts by a small duct. Eggs differ very much according to the birds that lay them, as to their color, form, bigness, age, and the different way of dressing them; those most used in food are hens' eggs; of which, such as are new-laid are best. As to the preservation of eggs, it is observed, that the egg is always quite full when it is first laid by the hen; but from that time it gradually becomes less and less so, to its decay; and, however compact and close its shell may appear, it is nevertheless perforated with a multitude of small holes, though too minute for the discernment of our eyes, the effect of which is a daily decrease of matter within the egg, from the time of its being laid; and the perspiration is much quicker in hot weather than in cold. To preserve eggs fresh, there needs no more than to preserve them full, and stop the transpiration: the method of doing which is, by stopping up those pores with matter which is not soluble in watery fluids; and on this principle it is, that all kinds of varnish, prepared with spirit of wine, will preserve eggs fresh for a long time, if they are carefully rubbed all over the shell; tallow, mutton fat, and even fresh butter, are also good for this purpose; for such as are rubbed over with any of these will keep as long as those coated over with varnish. M. Reaumur observes, that hens' eggs are properly a sort of chrysalis of the animal; their germ, after they are impregnated by the cock, containing the young animal alive, and waiting only a due degree of warmth to be hatched, and appear in its proper form. When eggs have been long kept, there is a road found near one of their ends, between the shell and the internal membrane; this is a mark of their being stale, and is the effect of an evaporation of part of their humidity: the varnish which M. Reaumur used to the chrysalis, being tried on eggs, was found to preserve them for two years, as fresh as if laid but the same day, and such as the nicest palate could not distinguish from those that were so.

The art of hatching chickens by means of ovens has long been practised in Egypt, chiefly in a village named Berme, and its environs. About the beginning of autumn, the natives scatter themselves all over the country; where each undertakes the management of an oven. These ovens are of different sizes, but, in general, they contain from 40,000 to 80,000 eggs, and they usually keep them working for about six months: as, therefore, each brood takes up in an oven, as under a hen, only twenty-one days, it is easy in every one of them to hatch eight different broods of chickens. Every Bermean is under the obligation of delivering to the person who trusts him with an oven, only two-thirds of as many chickens as there have been

ggs put under his care; and he is a gainer by his bargain, as more than two-thirds of the eggs usually produce chickens. This useful and advantageous method of hatching eggs was discovered in France by the ingenious M. Reaumur; who, by a number of experiments, reduced the art to fixed principles. He found that the heat necessary for this purpose is nearly the same with that marked 32° on his thermometer, or 96° on Fahrenheit's. The degree of heat which brings about the development of the ygnet, the gosling, and the Turkey pout, is the ame as that which fits for hatching the Canary ongster, and, in all probability, the smallest umming-bird: the difference is only in the me during which this heat ought to be communicated to the eggs of different birds. After many experiments, M. Reaumur found, that oves heated by means of a baker's oven, succeeded better than those made hot by layers of ung: and the furnaces of glass-houses, and ose of the melters of metals, by means of pipes o convey heat into a room, might, no doubt, be ade to answer the same purpose. As to the rm of the stoves, no great nicety is required. lothing more is necessary but to ascertain the egree of heat, by melting a lump of butter of e size of a walnut, with half as much tallow, nd putting it into a phial. This serves to indiate the heat with sufficient exactness: for when is too great, this mixture will become as quid as oil; and when the heat is too small, it ill remain fixed in a lump: but it will flow ke a thick syrup, upon inclining the bottle, if e stove be of a right temper. Great attention erefore should be given to keep the heat lways at this degree, and that all the eggs in the ove may equally share the irregularities of the eat, M. Reaumur has invented a sort of low oxes, without bottoms, and lined with furs. hese, which he calls artificial parents, not only helter the chickens from the injuries of the air, ut afford a kindly warmth, so that they take the enefit of their shelter as readily as they would ave done under the wings of a hen. After atching, it will be necessary to keep the chickns for some time in a room artfully heated, and urnished with these boxes; but afterwards they ay be safely exposed to the air in the courtard, in which it may not be amiss to place one f these artificial parents to shelter them, if there hould be occasion for it. They are generally a hole day after being hatched, before they take ny food at all. A few crumbs of bread may hen be given them for a day or two, after which hey will pick up insects and grass for themelves. But, to save the trouble of attending hem, capons may be taught to watch them in he same manner as hens do.

Egg Harbour, Little, a township of New Jersey, in Burlington county, consisting of 13,000 acres. The compact part of the township is called Clam Town. It has a small trade o the West Indies.

Egg Harbour River, Great, a river of New Jersey, which rises between Gloucester and Cumberland counties. After running E. S. E. a few miles, it becomes the divisional line between Cape May and Gloucester counties, and falls into the bay of its own name. The inlet from the Atlantic Ocean lies in 39° 22′. The river abounds with sheepshead, rock-fish, perch, oysters, clams, &c., which find a ready market at Philadelphia. This river is navigable twenty miles for vessels of 200 tons.

Egg Harbour River, Little, or Little Inlet, lies about seventeen miles north-east of Great Egg Harbour Inlet. It receives Mulicus River which rises in Gloucester and Burlington counties, and forms part of the divisional line a few miles from the bay. It is navigable twenty miles for vessels of sixty tons.

Egg Island, a small island on the west coast of Virginia, at the mouth of York River. 2. A small island in the Straits of Magellan, seven miles north-east of York Minster. 3. A small island on the north-east side of Delaware Bay, in Cumberland county. Long. 75° 12′ W., lat. 39° 16′ N.

EGINHART, or Æginhard, secretary to Charles the Great, and the most ancient of the German historians. It is said, that he insinuated himself into the favor of Imma, daughter of Charles the Great, and that Charles, having discovered the intrigue, married the two lovers, and gave them an estate in land. See Æginhard.

E'GLANTINE, *n. s.* Fr. *eglantier*. A species of rose; sweet-briar.

Sweet is the rose, but grows upon a brere;
Sweet is the juniper, but sharp his bough;
Sweet is the *eglantine*, but pricketh near;
So every sweet with sour is tempered still,
That maketh it be coveted the more. *Spenser.*

The leaf of *eglantine*, not to slander,
Out-sweetened not thy breath.
Shakspeare. Cymbeline.

Sycamores with *eglantine* were spread,
A hedge about the sides, a covering over head.
Dryden.

O blessed within the enclosure of your rocks,
Nor herds have ye to boast, nor bleating flocks,
No fertilizing streams your fields divide,
That show reversed the villas on their side;
No groves have ye; no cheerful sound of bird,
Or voice of turtle in your land is heard;
Nor grateful *eglantine* regales the smell
Of those, that walk at evening where ye dwell.
Cowper.

Eglantine, in botany. See Rosa.

EGLON, a king of the Moabites, who oppressed the Israelites for eighteen years. See Judges iii. 12—14. Calmet confounds this servitude of the Hebrews with that under Chushan-rishathaim, making it to subsist only eight years from A. M. 2591 to 2599; whereas this servitude under Eglon lasted eighteen years, and commenced A. M. 2661, and sixty-two years after they had been delivered by Othniel, from their subjection to Chushan-rishathaim.

EGMONT, New Guernsey, or Santa Cruz Island, one of Queen Charlotte's islands, in the South Pacific Ocean, discovered in 1595, by the Spanish navigator Mandana. He bestowed upon it the name of Santa Cruz, which was changed to Egmont by captain Carteret in 1767. It is high and mountainous throughout, being about

twenty-two miles in length, and eleven in breadth. The soil, from the abundance of small streams, produces several roots and fruits, but not in great profusion. Some of the natives are of a deep olive color, others black, and all of moderate size, with slender extremities. Their physiognomy is disagreeable, and tends to inspire that mistrust and dislike which their treacherous and dishonest conduct but too well justifies. They are tattooed, particularly on the back: wear white powder in their hair, and many ornaments. The men go naked, wrapping a cord several times round the belly: the women have a petticoat which descends to the knees, and cover the head, and part of the body, with a sort of shift. Their huts are large, having windows, and are generally placed under the shade of cocoa-trees along the shore. Their arms are bows, arrows, and darts. They chew betel; and have canoes with outrigging, formed of the trunk of a single tree, about fifteen feet long. Long. 165° 59′ E., lat. 10° 46′ S.

EGMONT ISLAND, an island in the Gulf of Mexico, on the west coast of East Florida, at the entrance of Spiritu Santo Bay. Long. 82° 55′ W., lat. 27° 54′ N. Also an island in the South Pacific Ocean, six miles in length, four in breadth, low, and covered with trees. Long. 138° 30′ W., lat. 19° 20′ N.

EGOOCHSHAC, a harbour on the North coast of the island of Unalashka, entered by captain Cook in the year 1778, who found some Russians settled here for the purpose of purchasing skins of the natives: they had store-houses, and a sloop of about thirty tons burden.

EGOTISM. Fr. *egoisme*, from Lat. pers. pron. *ego*; Gr. εγω.

Egotism is the coquetry of a modern author; whose epistles, dedicatory prefaces, and addresses to the reader, are so many affected graces, designed to draw the attention from the subject, towards himself; and make it be generally observed not so much what he says, as what he appears, or is, and what figure he already makes, or hopes to make in the fashionable world. *Shaftesbury.*

The most violent *egotism* which I have met with, in the course of my reading, is that of Cardinal Wolsey's; *ego et rex meus*, I and my king. *Spectator.*

A tribe of *egotists*, for whom I have always had a mortal aversion, are the authors of memoirs, who are never mentioned in any works but their own. *Id.*

EGRA, a town of Bohemia, seated on a river of the same name, formerly imperial, and possessing towns and villages. It contains a great number of able artificers, and is famous for its mineral waters. General Wallenstein was assassinated here in 1634. The French became masters of this town in 1741; but afterwards, being blocked up, they were forced to capitulate Sept. 7th, 1743. It is considered as a town of the greatest consequence in Bohemia, except Prague. It lies seventeen miles south-west of Elnbogen, and seventy-six west of Prague. Long. 12° 40′ E., lat. 50° 9′ N.

EGRE'GIOUS, *adj.* } Old Fr. *egrege*; Ital.
EGRE'GIOUSLY, *adv.* } Spanish, and Portug. *egregio*; Lat. *egregius* i. e. *e grege*, separated from the flock. Remarkable; extraordinary; now generally used in a bad sense; but Milton (see below) and other good writers formerly applied it to eminence and merit.

He might be able to adorn this present age, and furnish history with the records of *egregious* exploits both of art and valour. *Moore against Atheism.*

We may be bold to conclude, that these last times, for insolence, pride, and *egregious* contempt of all good order, are the worst. *Hooker's Preface.*

I suffered the pangs of an *egregious* death, to be stopt in, like a strong distillation, with cloaths. *Shakspeare.*

Ah me, most credulous fool!
Egregious murtherer! *Id. Cymbeline.*

Make the Moor thank me, love me, and reward me,
For making him *egregiously* an ass,
And practising upon his peace and quiet,
Even to madness. *Id. Othello*

The folly of fools', that is, the most *egregious* piece of folly that any man can be guilty of, is to play the knave. *Tillotson.*

One to empire born;
Egregious prince; whose manly childhood shewed
His mingled parents, and portended joy
Unspeakable. *Philips.*

And hence the *egregious* wizard shall foredoom
The fate of Louis and the fall of Rome. *Pope.*

An *egregious* and pregnan instance how far virtue surpasses ingenuity. *Woodward.*

He discovered that, besides the extravagance of every article, he had been *egregiously* cheated. *Arbuthnot's John Bull.*

EGREMONT, a market town, and formerly a borough in Cumberland, on a small river which falls into the Irish Sea, near the promontory of St. Bees, five miles S. S. E. from Whitehaven, and 293 north from London. The buildings in general are ancient, and many of the houses have piazzas in front. On a remarkable eminence are the ruins of a castle, in which the earl of Egremont holds a court. The town gives the title of earl to the Wyndham family. Market on Saturday, well supplied with barley and oats.

EGRESS, } Ital. *egresso*; Lat. *egressus*,
EGRESSION. } from *e*, out, and *gradior*, *gressus*, to walk; the act of going out; departure.

Gates of burning adamant,
Barred over us, prohibit all *egress*. *Milton.*

This water would have been locked up within the earth, and its *egress* utterly debarred, had the strata of stone and marble remained continuous. *Woodward's Natural History.*

The vast number of troops is expressed in the swarms; their tumultuous manner of issuing out of their ships, and the perpetual *egression*, which seemed without end, are imaged in the bees pouring out. *Pope.*

E'GRIOT, *n. s.* Fr. *aigret*, perhaps from *aigre*, sour. A species of cherry.

The cœur-cherry, which inclineth more to white, is sweeter than the red; but the *egriot* is more sour. *Bacon.*

E G Y P T.

EGYPT, an extensive country of Africa, lying between 30° and 36° of E. long., and between 22° and 31° of N. lat. It is bounded by the Mediterranean on the north, by the Red Sea and Isthmus of Suez, which divide it from Arabia, on the east, by Abyssinia or Ethiopia on the south, and by the deserts of Barca and Nubia on the west; being 600 miles in length from north to south, and from 100 to 250 in breadth from east to west. Ancient Egypt is by some divided into two parts, the Upper and Lower Egypt: by others into three, the Upper Egypt, properly so called, or Thebais; the Middle Egypt, or Heptanomis; and the Lower Egypt, the best part of which was the Delta, or that space encompassed by the branches of the Nile. The whole area of cultivable soil has been recently estimated at 11,000 square miles.

Egypt may with justice lay claim to as high antiquity as any nation in the world. It was most probably peopled by Mizraim the son of Ham and grandson of Noah. By its ancient inhabitants it was called Chemia, and is still called Chemi in the language of the Copts or native Egyptians. In Scripture it is generally named Mizraim; though in the Psalms it is styled the land of Ham. To us it is best known by the name of Egypt, the etymology of which is more uncertain. Some derive it from Ægyptus, a supposed king of the country: others say it signifies no more than 'the land of the Copts;' Aia in Greek signifying the country, and Αιγοπτος, Aicoptos, being easily hardened into Ægyptus. The most probable opinion, however, seems to be, that it received this name from the blackness of its soil and the dark color both of its river and inhabitants; for such a blackish color is by the Greeks called ægyptios, from γυψ, and αιγυπιος, a vulture; and by the Latins, subvulturius. For the same reason other names of a similar import have been given to this country by the Greeks; such as Aeria, and Melambolus: the river itself was called Melo, or Melas; by the Hebrews Shihor, and by the Ethiopians Siris; all signifying black.

The air and climate of Egypt are extremely warm, not only from the height of the sun, which in summer approaches to the zenith, but from the want of rain, and from the vicinity of those burning and sandy deserts which lie to the south. In July and August, according to M Volney, Reaumur's thermometer stands, even in the most temperate apartments, at 24° or 25° above the freezing point; and in the southern parts it is said to rise still higher. Hence, he says, only two seasons should be distinguished in Egypt, the cool and the hot, or spring and summer. The latter continues for the greatest part of the year, viz. from March to November, or even longer; for by the end of February the sun is intolerable to an European at nine o'clock in the morning. During the whole of this season the air seems to be inflamed, the sky sparkles, and every one sweats profusely, even without the least exercise, and when covered with the lightest dress. This heat is tempered by the inundation of the Nile, the fall of the night dews, and the subsequent evaporation; so that some of the European merchants, as well as the natives, complain of the cold in winter. The dew does not fall regularly throughout the summer, as with us; the parched state of the country not affording a sufficient quantity of vapor for this purpose. It is first observed about St. John's day (June 24th), when the river has begun to swell, and consequently a great quantity of water is raised from it by the heat of the sun, which, being soon condensed by the cold of the night air, falls down in copious dews. It might be imagined that as, for three months of the year, Egypt is in a wet and marshy situation, the excessive evaporation and putrefaction of the stagnating waters would render it very unhealthy. But this is by no means the case. The great dryness of the air makes it absorb vapors of all kinds with the utmost avidity; and these, rising to a great height, are carried off by the winds either to the south or north without communicating any of their pernicious effects. This dryness is so remarkable in the internal parts of the country, that flesh meat exposed to the open air does not putrefy even in summer, but soon becomes hard and dry like wood. In the deserts there are frequently dead carcases thus dried in such a manner, and become so light, that one may easily lift that of a camel with one hand. In the maritime parts, however, this dryness of the air is not to be expected. They discover the same degree of moisture which usually attends such situations. At Rosetta and Alexandria iron cannot be exposed to the air twenty-four hours without rusting. According to the above writer, the air of Egypt is also strongly impregnated with salts. No experiments have ever shown, that any salt was or could be diffused in the air, except volatile alkali, and this is now known to be formed by the union of two permanently elastic fluids: and it is certain that a saline air would quickly prove fatal to the animals who breathed it. The abundance of this kind of salt in Egypt therefore only shows that, by some unknown operation, the heat of the sun forms it from the two ingredients of earth and water, though we do not yet understand the manner, nor are able to imitate this natural operation. To this saline property of the earth M. Volney ascribes the excessive quickness of vegetation in Egypt, which is so great that a species of gourd, called kara, will in twenty-four hours send forth shoots of four inches in length; but, in all probability for the same reason, no exotic plant will thrive in Egypt. The merchants are obliged to send annually to Malta for their garden seeds; for, though the plants thrive very well at first, yet, if the seed of them be preserved and sown, they always come up too tall and slender. In consequence of the great dryness of the air, Egypt is exempted from the phenomena of rain, hail, snow, thunder, and lightning. Earthquakes are also seldom heard of in this country; though they have sometimes been very fatal and

destructive, particularly one in 1112. In the Delta it never rains in summer, and very seldom at any other time. In 1761, however, such a quantity of rain unexpectedly fell, that a great number of houses, built with mud-walls, tumbled entirely down by being soaked with the water, to which they were unaccustomed. In the Higher Egypt the rain is still less frequent; but the people, sensible of the advantages which accrue from it, always rejoice when any falls, however insufficient to answer the purpose. This deficiency of rain is supplied by the inundation and dews. The latter proceed partly from the waters of the inundation, and partly from the sea. At Alexandria, after sun-set, in April, the clothes exposed to the air on the terraces are soaked with them as if it had rained. These dews are more or less copious according to the direction of the wind. They are produced in the greatest quantity by the west and north-west, which blow from the sea; but the south and south-east winds, blowing over the deserts of Africa and Arabia, produce none.

Though the climate of Egypt is far from being unhealthy, yet there are not a few diseases which seem to be peculiar to it, and to have their origin either from the constitution of the atmosphere, or the manner of living. One of these has been supposed to be the plague; which opinion was supported by Dr. Mead, who endeavoured to assign a natural reason why it should take its origin in this country. But it is now universally agreed that the plague never originates in the interior parts of Egypt, but always begins at Alexandria, passing successively thence to Rosetta, Cairo, Damietta, and the rest of the Delta. It is likewise observed, that its appearance is always preceded by the arrival of some vessel from Smyrna or Constantinople; and that, if the plague has been very violent in either of these cities, the danger to Egypt is the greater. On proper enquiry, it is found to be much more a native of Constantinople; whence it is exported by the absurd negligence of the Turks, who refuse to take any care to prevent the spreading of the infection. As they sell even the clothes of the dead without the least ceremony, and ships laden with this pernicious commodity are sent to Alexandria, it is no wonder that it should soon make its appearance there. As soon as it has reached Cairo, the European merchants shut themselves up with their families in their khans or lodgings, taking care to have no further communication with the city. Their provisions are now deposited at the gate of the khan, and are taken up by the porter with iron tongs; who plunges them into a barrel of water provided for the purpose. If they have occasion to speak to any person, they take care to keep at such a distance as to avoid touching or even breathing upon each other. By these precautions they certainly escape the general calamity, except by accident. There is a remarkable difference betwixt the plague at Constantinople and the plague in Egypt. In the former it is most violent in summer, and in the latter in winter, ending there always in June. It is also remarkable that the water carriers of Egypt, whose backs, from the nature of their occupation, are constantly wet, never have the plague. It appears in Egypt every fourth or fifth year, when it makes such ravages as would depopulate the country, were it not for the vast concourse of strangers who arrive here every year from all parts of the Turkish empire. A malady which seems in reality to be peculiar to Egypt is blindness. This is so common at Cairo, that M. Volney informs us, out of 100 people, whom he met in the street, he might reckon twenty quite blind; ten without the sight of one eye; and twenty others with their eyes red, purulent, or blemished. Almost every one, says he, wears a fillet, a token of an approaching or convalescent ophthalmy. In considering the causes of this disorder, he reckons the sleeping upon terraces to be a principal one. The south wind, he says, cannot be the cause; otherwise the Bedouins would be equally subject to it with the Egyptians themselves; but what is with the greatest probability to be assigned as the cause, is the very poor and little nutritive food which the natives are obliged to use. 'The cheese, sour milk, honey, confection of grapes, green fruits, and raw vegetables,' says he, 'which are the ordinary food of the people, produce in the stomach a disorder which physicians have observed to affect the sight: the raw onions, especially, which they devour in great quantities, have a peculiar heating quality, as the monks of Syria made me remark on myself. Bodies thus nourished abound in corrupted humors, which are constantly endeavouring a discharge. Diverted from the ordinary channels, by habitual perspiration, these humors fly to the exterior parts, and fix themselves where they find the least resistance. They therefore naturally attack the head, because the Egyptians, by shaving it once a week and covering it with a prodigiously hot head dress, principally attract to it the perspiration; and, if the head receive ever so slight an impression of cold on being uncovered, this perspiration is suppressed, and falls into the teeth, or still more readily on the eyes as being the tenderest parts. It will appear the more probable that the excessive perspiration of the head is a principal cause, when we reflect that the ancient Egyptians, who went bare-headed, are not mentioned by physicians as being so much afflicted with ophthalmies; though we are informed by historians that some of the Pharaohs died blind. The Arabs of the desert, who cover the head but little, especially when young, are also very little subject to them. In this country blindness is often the consequence of the small-pox, a disorder very frequent and very fatal among the Egyptians. They are not unacquainted with inoculation, but very seldom practise it. To the same cause, viz. unwholesome food, M. Volney ascribes the general deformity of the beggars, and miserable appearance of their children; which he says are nowhere so wretched. Their hollow eyes, pale, and puffed faces, swollen bellies, meagre extremities, and yellow skins, make them always seem as if they had not long to live. Their ignorant mothers pretend that this is the effect of the evil eye of some envious person, who has bewitched them; and this ancient prejudice is still general in Turkey; but the real cause is the badness of their food. In

spite of the talismans, therefore, an incredible number of them perish; nor is any city more fatal to the population of the neighbouring country than Grand Cairo. The venereal disease, which, for reasons best known to themselves, the inhabitants call the blessed evil, is so general at Cairo, that one half of the inhabitants are infected. It is extremely difficult to cure, though the symptons are comparatively very mild, insomuch, that people who are infected with it will frequently live to the age of eighty; but it is fatal to children born with the infection, and exceedingly dangerous to such as emigrate to a colder climate. Besides these, there are two uncommon diseases met with in Egypt, viz. a cutaneous eruption which returns annually; and a swelling of the testicles, which often degenerates into an enormous hydrocele. The former comes on towards the end of June, or beginning of July, making its appearance in red spots and pimples all over the body, occasioning a very troublesome itching. The cause of this distemper, M. Volney says, is the corruption of the water of the Nile, which, towards the end of April, becomes very putrid. After this has been drunk for some time, the waters of the inundation, which are fresh and wholesome, tend to introduce some change in the blood and humors; whence a cutaneous eruption is the consequence. The hydrocele is most commonly attached to the Greeks and Copts; and is attributed to the quantity of oil they use, as well as to their frequent hot bathing. Our author remarks, that in Syria, as well as in Egypt, constant experience has shown, that brandy distilled from common figs, or from the fruit of the sycamore tree, as well as from the dates and the fruit of the nopal, has a most immediate effect on the testicles, which it renders hard and painful the third, or fourth, day after it has been drunk; and, if the use of it be not discontinued, the disorder degenerates into a confirmed hydrocele. Brandy distilled from dried raisins has not the same effect: this is always mixed with aniseeds, and is very strong, being distilled three times. The Christians of Syria, and the Copts of Egypt, make great use of it; the latter especially drink whole bottles of it at their suppers. I imagined this an exaggeration; but I have myself had ocular proofs of its truth, though nothing could equal my astonishment that such excesses do not produce instant death, or at least every symptom of the most insensible drunkenness. In Spring malignant fevers prevail in this country; concerning which M. Volney mentions no remarkable particular, but that eggs are a kind of poison, and that bleeding is very prejudicial. He recommends a vegetable diet, and the bark in very large quantity.

M. Larrey, who was the chief surgeon of Buonaparte's medical staff, divides the climate into what he calls quatre saisons constitutionnelles; the first of which commences about the 20th August, when the Nile begins to overflow its banks. From this moment until the autumnal equinox, the inundation increases; lower Egypt is then like a sea, in which the towns and villages appear as so many islands: towards the end of September the waters retire, and the general seed-time commences. To this season he gives the name of saison humide; the west winds and fogs then prevail, and produce ophthalmia, fever, diarrhœa, and catarrh.

His second season begins with December, and continues to the 1st March. The winds blow mostly from the east; the nights are cold, but during the day the temperature is that of June in France. The various productions of the earth are vigorously on the increase; the surface is spread over with the most lively tints of verdure; the birds and other animals 'se livrent à leurs amours,' and all nature, reanimated by the moderate heat of the sun and the fecundity of the river, seems to grow young again. This period is healthy, if the night airs are avoided, and may justly be called, la saison fécundante.

The saison morbide of this writer extends from the beginning of March to the end of May. The east winds, which tempered the air during the spring, now pass to the south, which they seldom quit before the end of May or beginning of June. These are the 'winds of fifty days,' blowing over the deserts, and called by the Arabs, 'simoom,' by the Turks 'samul.'

The fourth, which M. Larrey designates under the name of saison étésienne, commences about the middle of June, or just before the solstice, and continues to the overflowing of the Nile.

The winds are then variable, but, towards the end of it, fix themselves to the north, when they become regular, rising and falling with the sun. These winds, in passing over the Mediterranean, are generally supposed to carry with them aqueous vapors to the mountains of Ethiopia or Abyssinia; where, being condensed, they are precipitated in torrents of rain, at and after the summer solstice, producing that gradual and constant periodical increase of the Nile, on which the sustenance of the whole population depends. The air is now clear and dry, and, though the heat is excessive, it is the most healthy part of the year.

According to M. Volney, who gives a very particular description of the face of the country, the entrance into Egypt at Rosetta presents a most delightful prospect, by the perpetual verdure of the palm trees on each side, the orchards watered by the river, with orange, lemon, and other fruit trees, which grow there in vast abundance; and the same beautiful appearance is continued all the way to Cairo. As we proceed farther up the river, he says, nothing can more resemble the appearance of the country than the marshes of the lower Loire, or the plains of Flanders: instead, however, of the numerous trees and country houses of the latter, we must imagine some thin woods of palms and sycamores, with a few villages of mud-walled cottages, built on artificial mounds. All this part of Egypt is very low and flat, the declivity of the river being so gentle, that its waters do not flow at a greater rate than one league in an hour. Throughout the country nothing is to be seen but palm trees, single or in clumps, which become more rare as you advance; with wretched villages composed of huts with mud walls, and a boundless plain, which at different seasons is an ocean of fresh water, a miry morass, a verdant

field, or a dusty desert; and on every side an extensive and foggy horizon, where the eye is wearied and disgusted. At length, towards the junction of the two branches of the river, the mountains of Cairo are discovered on the east; and to the south-west three detached masses appear, which, from their triangular form, are known to be the Pyramids. We now enter a valley which turns to the south, between two chains of parallel eminences. That to the east, which extends to the Red Sea, merits the name of a mountain from its steepness and height, as well as that of a desert from its naked and savage appearance. Its name in the Arabic language is Mokattam, or the hewn mountain. The western is nothing but a ridge of rocks covered with sand, which has been very properly termed a natural mound or causeway. In short, that the reader may at once form an idea of this country, let him imagine on one side a narrow sea and rocks; on the other, immense plains of sand; and, in the middle, a river, flowing through a valley of 150 leagues in length, and from three to seven wide, which, at the distance of thirty leagues from the sea, separates into two arms; the branches of which wander over a soil almost free from obstacles, and void of declivity.

This country is still divided into two principal parts, called the Higher, or Upper, and Lower Egypt. It is subdivided into eighteen provinces.

Egypt, Higher, or Upper, says M. Savary, is only a long narrow valley beginning at Sienna and terminating at Cairo. It is bounded by two chains of mountains running from north to south and taking their rise from the last cataract of the Nile. On reaching the latitude of Cairo they separate to the right and left; the one taking the direction of mount Colzoum, the other terminating in some sand banks near Alexandria; the former being composed of high and steep rocks, the latter of sandy hillocks over a bed of calcareous stone. Beyond these mountains are deserts bounded by the Red Sea on the east, and on the west by other parts of Africa; having in the middle that long plain, which, even where widest, is not more than nine leagues over. Here the Nile is confined in its course between these insuperable barriers, and, during the time of its inundation, overflows the country all the way to the foot of the mountains; and Mr. Bruce observes, that there is a gradual slope from the bed of the river to those mountains on both sides. The baron de Tott says, that the mountains four leagues from the Nile, and facing Cairo, are only a ridge of rocks above forty or fifty feet high, which divide Egypt from the plains of Libya; which ridge accompanies the course of the river, at a greater or less distance, and seems as if only intended to serve as a bank to the general inundation.

Egypt, Lower, according to M. Savary, comprehends all the country between Cairo, the Mediterranean, the Isthmus of Suez, and Libya. 'This immense plain,' says he, 'presents on the borders of its parching sands a stripe of lands, cultivated along the canals of the river, and in the middle a triangular island to which the Greeks gave the name of Delta; at the top of the angle of which, the baron de Tott informs us, the rocks of Libya and the coasts of Arabia open and recede from each other, towards the east and west parallel to the Mediterranean. This great extent of country from Barca to Gaza, is either overflowed by the river, or capable of being so; which thus fertilizes in a high degree a tract of country, seemingly devoted to perpetual barrenness, on account of the want of rain and the heat of the climate. According to the testimonies of both Mr. Bruce and M. Volney, the coast of Egypt is so extremely low, that it cannot be discovered at sea till the mariners come within a few leagues of it. In ancient times the sailors pretended to know when they approached this country, by a kind of black mud brought up by their sounding lines from the bottom of the sea; but this notion, though as old as the days of Herodotus, has been discovered to be a mistake by Mr. Bruce; who found the mud to arise while the vessel was opposite to the deserts of Barca. All along the coast of Egypt a strong current sets to the eastward.

The Egyptians, like the Chinese, pretend to an excessive antiquity, and have been said to possess records for 10,000, 20,000, or even 50,000 years. Thus their history is so much involved in obscurity and fable, that for many ages it must be passed over in silence. The first mortal king whom the Egyptians own to have reigned in that country, was Menes or Menas; whom some chronologers reckon the same with Mizraim, the grandson of Noah. He had been preceded, however, by a set of immortals (a fable probably founded upon the long lives of the Antediluvians), but who, notwithstanding their immortality, had left him the kingdom in a very bad situation: for the whole country except Thebais was a morass; the people also were quite destitute of religion and every kind of knowledge which could render life comfortable. Menes diverted the course of the Nile, which, before that time had washed the foot of a sandy mountain near the borders of Lybia, built the city of Memphis, instructed his subjects, and accomplished a variety of wonders usually attributed to the founders of kingdoms. From the time of Menes, the Egyptian chronology is filled with a list of 330 kings, who reigned 1400 years, but did nothing worthy of notice. The first distinct fact of history we find concerning Egypt, is the irruption of the shepherds, by whom the country was subdued; but at what period this revolution happened cannot be known. The affair is thus related by Manetho. In the reign of Timaus, king of Egypt, a multitude of men, ignoble in their race, pouring from the east into Egypt, made war with the inhabitants; who submitted to them without resistance. The shepherds, however, behaved with the greatest cruelty; burnt the cities, threw down the temples, and put to death the male inhabitants, carrying the women and children into captivity. This people came from Arabia, and were called Hycsos, or king shepherds. They held Egypt in subjection for 259 years; at the end of which period they were obliged, by a king of Upper Egypt, named Amosis or Thethmosis, to leave the country. This prince's father had gained great advantages over them, and shut them up in a place called

Abaris or Avaris, containing 10,000 acres of land. Here they were closely besieged by Amosis, with an army of 400,000 men, till at last an agreement was made, in consequence of which the shepherds withdrew from Egypt with their families, to the number of 240,000; and, taking the way of the desert, entered Syria; but fearing the Assyrians, who were then very powerful, and masters of Asia, they entered the land of Canaan, and built there the city of Jerusalem. According to Mr. Bruce, the shepherds who invaded Egypt were no other than the inhabitants of Barabra. They were, he says, carriers to the Cushites who lived farther to the south. The latter had built the many stately temples in Thebes and other cities of Egypt; though, according to him, they had no dwelling places, but holes or caves in the rocks. Being a commercial people, they remained at home collecting and preparing their articles, which were dispersed by the Barabers, or shepherds above mentioned. These, from the nature of their employment, lived in moveable habitations, as the Tartars do at this day. By the Hebrews, he tells us, they were called phut but shepherds by every other people; and from the name baraber the word Barabra is derived. By their employment, which was the dispersing the Arabian and African goods all over the continent, they had become a great and powerful people; and, from their opposite dispositions and manners, were often enemies to the Egyptians. To one Salatis our author ascribes the destruction of Thebes in Upper Egypt, so much celebrated by Homer for its magnificence. But this certainly cannot be the case; for Homer wrote long after the time of Joseph: and we find that even then the Egyptians held the shepherds in abhorrence, in all probability because they had been grievously oppressed by them. Mr. Bruce reckons three invasions of these people, viz.: 1st, that of Salatis already mentioned, who overthrew the first dynasty of Egyptian kings from Menes, and destroyed Thebes; 2d, that of Sabacco or So; for, according to him, this was not the name of a single prince, but of a people, and signifies shepherds; and 3d, after the building of Memphis, where 240,000 of them were besieged, as above mentioned. But these accounts are inconsistent; for how is it possible that the third invasion, antecedent to the building of Jerusalem, could be posterior to the second, if the latter happened only in the days of Hezekiah? In these early ages, however, it appears that the kingdom of Egypt had been very powerful, and its dominion very widely extended; as it is said, that the Bactrians revolted from Osymandyas, another Egyptian king of very high antiquity, and of whose wealth the most marvellous accounts are given. After an unknown interval of time from this monarch, reigned Sesostris. He was the first great warrior whose conquests are recorded with any degree of distinctness. In what age of the world he lived, is uncertain. Some chronologers, among whom is Sir Isaac Newton, are of opinion, that he is the Sesac, or Shishak, who took Jerusalem in the reign of Rehoboam. Others place him much earlier; and Mr. Whiston supposes him to have been the Pharaoh who refused to part with the Israelites, and was at last drowned in the Red Sea. Mr. Bryant endeavours to prove that no such person ever existed; but that in his history, as well as that of many ancient heroes, we have an abridgment of that of the Cushites, or Babylonians, who spread themselves over great part of the known world, and every where brought the people in subjection to them. His reign is reckoned the most extraordinary part of the Egyptian history; and the following is the least fabulous account that can be obtained of it. The father of Sesostris was told in a dream, by the god Vulcan, that his son, then newly born, should be lord of the whole earth. Upon the credit of this vision, his father took all the males in Egypt that were born on the same day with Sesostris, under his protection; appointed nurses and proper persons to take care of them, and had them treated like his own child; being persuaded that they who had been the constant companions of his youth would prove his most faithful ministers and soldiers. As they grew up, they were inured to laborious exercises; and, in particular, were never permitted to taste any food till they had performed a course of 180 furlongs, upwards of twenty-two of our miles. When the king imagined they were sufficiently educated in the martial exercises in which he designed them to excel, they were sent for a trial of their abilities against the Arabians. In this expedition Sesostris proved successful, and in the end subdued that people, who had never before been conquered. He was then sent to the westward, and conquered the greatest part of Africa; nor could he be stopped in his career till he arrived at the Atlantic Ocean. Whilst he was on this expedition, his father died; and Sesostris then resolved to fulfil the prediction of Vulcan, by actually attempting the conquest of the world. As he suspected this must take up a long time, he prepared for his journey in the best manner possible. The kingdom he divided into thirty-six provinces, and endeavoured to secure the affections of his people by gifts both of money and land. He forgave all who had been guilty of offences, and discharged the debts of all his soldiers. He then constituted his brother Armais the supreme regent; but forbad him to use the diadem, and commanded him to offer no injury to the queen or her children, or the royal concubines. His army is said to have consisted of 600,000 foot, 24,000 horse, and 27,000 chariots. Besides these land forces, he had at sea two mighty fleets; one, according to Diodorus, of 400 sail. Of these fleets, one was designed to make conquests in the west, and the other in the east, and therefore the one was built on the Mediterranean, and the other on the Red Sea. The first of these conquered Cyprus, the coast of Phœnicia, and several of the Cyclades; the other all the coasts of the Red Sea; but its progress was stopped by shoals and difficult places which the navigators could not pass; so that he seems not to have made many conquests by sea. With the land forces Sesostris marched against the Ethiopians and Troglodites, whom he overcame, and obliged them to pay him a tribute of gold, ebony, and ivory. From thence he proceeded as far as the promontory of Dira, near the straits of Babelmandel, where he set up a pillar with an inscription in sacred characters.

He then marched on to the country where cinnamon grows, probably some place in India; and here he in like manner set up pillars, which were to be seen for many ages. As to his farther conquests, it is agreed by almost all authors of antiquity, that he over-ran and pillaged the whole continent of Asia, and some part of Europe. He crossed the Ganges, and erected pillars on its banks; and thence is said to have marched eastward to the very extremity of the Asiatic continent. Returning thence, he invaded the Scythians and Thracians; but authors do not agree that he conquered them. Some even affirm, that he was overthrown by them with great slaughter, and obliged to abandon a considerable part of his booty and military stores. But whether he had good or bad success in these parts, it is believed that he settled a colony in Colchis. Herodotus, however, who gives the most particular account of the conquests of this monarch, does not say whether the colony was designedly planted by Sesostris; or whether part of his army loitered behind, and took up their residence in that region. From his own knowledge, he asserts, that the inhabitants of that country were undoubtedly of Egyptian descent. This was evident from the personal resemblance they bore to the Egyptians, who were swarthy and frizzle-haired; but more especially from the conformity of their customs, particularly circumcision. The utmost boundary of this monarch's conquests, however, was in the country of Thrace; for, beyond that country his pillars were no where to be seen. These pillars he erected in every region which he conquered, with the following inscription, 'Sesostris, king of kings, and lord of lords, subdued this country by the power of his arms.' Besides these, he left also statues of himself; two of which, according to Herodotus, were to be seen in his time; one one on the road between Ephesus and Phocæa, and the other between Smyrna and Sardis; they were armed after the Ethiopian and Egyptian manner, holding a javelin in one hand and a bow in the other. The reasons given by Sesostris for returning into Egypt from Thrace, and thus leaving the conquest of the world unfinished, were the want of provisions for his army, and the difficulty of the passes. Most probably, however, his return was hastened by the intelligence he received from the high priest of Egypt, concerning the rebellious proceedings of his brother; who, encouraged by his long absence, had assumed the diadem, and violated the queen, and the royal concubines. On receiving an account of this, Sesostris hastened from Thrace; and at the end of nine years came to Pelusium in Egypt, attended by an innumerable multitude of captives of different nations, and loaded with the spoils of Asia. His treacherous brother, we are told, met him at the gates of the city; and Sesostris is said to have accepted of an invitation to an entertainment from him. At this he drank freely, together with the queen, and the rest of the royal family. During the continuance of the entertainment, Armais caused a great quantity of dried reeds to be laid round the apartment where they were to sleep; and as soon as they were retired to rest set fire to them. Sesostris perceiving the danger he was in, and that his guards, overcharged with liquor, were incapable of assisting him, rushed through the flames, and was followed by his wife and children. In thanksgiving for his deliverance, he made several donations to the gods, particularly to Vulcan the god of fire. He then took vengeance on his brother Armais, said to be the Danaus of the Greeks, who, being driven out of Egypt, withdrew into Greece. Sesostris now laid aside all thoughts of war, and applied himself wholly to such works as might tend to the public good, and his own future reputation. To prevent the incursions of the Syrians and Arabians, he fortified the east side of Egypt with a wall, which ran from Pelusium through the desert to Heliopolis, for 187½ miles. He raised also an incredible number of lofty mounds of earth, on which he constructed various new towns to secure them from the inundations of the Nile. From Memphis to the sea he dug canals which branched out from the Nile; and not only made an easier communication between different places, but rendered the country in a great measure impassable to any enemy. He erected a temple in every city in Egypt, and dedicated it to the supreme deity of the place; but, in the course of this great undertaking, he took care to employ none of his Egyptian subjects. Thus he secured their affection, and employed the vast multitude of captives he had brought along with him: to perpetuate the memory of a transaction so remarkable, he caused it to be inscribed on all these temples, 'No one native labored hereon.' In the city of Memphis, before the temple of Vulcan, he raised six gigantic statues, each of one stone. Two of them were thirty cubits high, representing himself and his wife; the other four were twenty cubits each, and represented his four sons. He raised also two obelisks of marble 120 cubits high, with inscriptions, denoting the greatness of his power, his revenues, &c. The captives taken by Sesostris are said to have been treated with the greatest barbarity; so that at last they resolved to deliver themselves from a servitude so intolerable. The Babylonians particularly were concerned in this revolt, and laid waste the country to some extent: but, being offered a pardon and a place to dwell in, they were pacified, and built a city, which they called Babylon. Towards the conquered princes, who waited on him with their tribute, the Egyptian monarch behaved with unparalleled insolence. On certain occasions, he is said to have unharnessed his horses, and, making kings together, made them draw his chariot. One day, however, observing one of the kings who drew him to look back upon the wheels with great earnestness, he asked, what made him look so attentively at them? The unhappy prince replied, 'O king, the going round of the wheel puts me in mind of the vicissitudes of fortune; for as every part of the wheel is uppermost and lowermost by turns, so it is with men, who one day sit on a throne, and on the next are reduced to the vilest degree of slavery.' This answer brought the insulting conqueror to his senses; so that he gave over the practice, and thenceforth treated his captives with great humanity. At length this mighty monarch lost his sight, and laid violent hands on himself.

After the death of Sesostris, we find another

hasm of an indeterminate length in the Egyptian istory. It concludes with the reign of Amasis, r Amosis; who being a tyrant, his subjects oined Actisanes the king of Ethiopia to drive im out. Thus Actisanes became master of the ingdom; and after his death follows another hasm in the history, during which the em- ire is said to have been in a state of anarchy or five generations. This period brings us down o the times of the Trojan war. The reigning rince in Egypt was at that time called Cetes; by he Greeks, Proteus. The priests reported that e was a magician; and that he could assume any hape he pleased, even that of fire. This fable, s told by the Greeks, derived its origin from a ustom among the Egyptians, perhaps introduced y Proteus, that of adorning and distinguish- ng the heads of their kings with the represen- ations of animals or vegetables, or even with urning incense, in order to strike the beholders ith the greater awe. Whilst Proteus reigned, 'aris or Alexander, the son of Priam king of 'roy, was driven by a storm on the coast of 'gypt with Helen, whom he was carrying off om her husband. But when the Egyptian mo- arch heard of the breach of hospitality com- itted by Paris, he seized him, his mistress, and ompanions, with all the riches he had brought om Greece. He detained Helen, with all the ffects belonging to Menelaus her husband, pro- ising to restore them to the injured party when- ver they were demanded; but commanded Paris nd his companions to depart out of his do- inions in three days. In what manner Paris fterwards prevailed upon Proteus to restore his istress, we are not told; neither do we know ny thing further of the transactions of this rince's reign nor of his successors, except what as entirely the air of fable, till the days of Sa- acon the Ethiopian, who again conquered this ingdom. He began his reign with an act of reat cruelty, causing the conquered prince to be urnt alive: nevertheless, he no sooner saw him- elf firmly established on the throne of Egypt, han he became a new man; so that he is highly xtolled for his mercy, clemency, and wisdom. He is thought to have been the *So* mentioned in cripture, who entered into a league with Hoshea ing of Israel against Shalmaneser king of As- yria. He is said to have been excited to the nvasion of Egypt by a dream, in which he was ssured, that he should hold that kingdom for ifty years. Accordingly, he conquered Egypt, s had been foretold; and at the expiration of he time above-mentioned, he had another dream, n which the tutelar god of Thebes acquainted im, that he could no longer hold the kingdom f Egypt with safety and happiness, unless he assacred the priests as he passed through them with his guards. Being haunted with this vision, nd at the same time abhorring to hold the king- lom on such terms, he sent for the priests, and cquainted them with what seemed to be the will of the gods. Upon this it was concluded, hat it was their pleasure, that Sabacon should remain no longer in Egypt; and therefore he immediately returned to Ethiopia. Of Anysias, who was Sabacon's immediate successor, we have no particulars worth notice. After him reigned Sethon, who was both king and priest of Vulcan. He gave himself up to religious contemplation; and not only neglected the military class, but deprived them of their lands. At this they were so much incensed, that they entered into an agreement not to bear arms under him; and in this state of affairs Sennacherib king of Assyria arrived before Pelusium with a mighty army. Sethon now applied to his soldiers, but in vain; they unanimously persisted in refusing to march under his banner. Being therefore destitute of all human aid, he applied to the god Vulcan, and requested him to deliver him from his ene mies. Whilst he was yet in the temple of tha god, it is said, he fell into a deep sleep; durin which, he saw Vulcan standing at his side, anc exhorting him to take courage. He promised, that if Sethon would but go out against the As- syrians, he should obtain a complete victory over them. Encouraged by this assurance, the king assembled a body of artificers and laborers, and marched towards Pelusium. He had no occa- sion, however, to fight; for the very night after his arrival at Pelusium, an innumerable multi- tude of field rats, entering the enemy's camp, gnawed to pieces the quivers, bowstrings, and shield-straps. Next morning, when Sethon found the enemy disarmed, and beginning to fly, he pursued them to a great distance, making a ter- rible slaughter. In memory of this extraordinary event, a statue of Sethon was erected in the temple of Vulcan, holding in his hand a rat, with these words: 'Whosoever beholdeth me, let him be pious.'

Not long after the death of Sethon, the form of government in Egypt was totally changed. The kingdom was divided into twelve parts, over which as many of the chief nobility presided. This division, however, subsisted but for a short time. Psammiticus, one of the twelve, dethroned all the rest, fifteen years after the division had been made. The history now begins to be di- vested of fable; and from this time may be ac- counted equally certain with that of any other nation. The vast conquests of Sesostris were now no longer known; for Psammiticus pos- sessed no more than the country of Egypt itself. It appears, indeed, that none of the successors of Sesostris, or even that monarch himself, had made use of any means to keep in subjection the countries he had once conquered. Perhaps, in- deed, his design originally was rather to pillage than to conquer; and therefore on his return, his vast empire vanished. Psammiticus, how- ever, endeavoured to extend his dominions by making war on his neighbours; but, putting more confidence in foreign auxiliaries than in his own subjects, the latter were so much offended, that upwards of 200,000 fighting men emigrated in a body, and took up their residence in Ethiopia To repair this loss, Psammiticus encouraged commerce, and opened his ports to all strangers, whom he greatly caressed, contrary to the impo- litic maxims of his predecessors, who refused to admit them into the country. He also laid siege to Azotus in Syria which held out for twenty- nine years against the whole strength of the kingdom; from which it appears that Psammiti- cus was no great warrior. He is reported to

have sent to discover the springs of the Nile: and is said to have made an attempt to discover the most ancient language and religion in the world. Nechus, the son and successor of Psammiticus, is the Pharaoh-Necho of Scripture, and was a prince of an enterprising and warlike genius. In the beginning of his reign he attempted to cut through the isthmus of Suez, between the Red Sea and the Mediterranean; but was obliged to abandon the enterprise, after having lost 120,000 men in the attempt. After this he sent a ship, manned with some expert Phœnician mariners, on a voyage to explore the coasts of Africa. Accordingly, they performed the voyage; sailed round the continent of Africa: and after three years returned to Egypt, where their relation was deemed incredible. The most remarkable wars in which this king was engaged, are recorded in the sacred writings. He went out against the king of Assyria, by the divine command, as he himself told Josiah (II Chron. xxxv. 21); but, being opposed by this king, he defeated and killed him at Megiddo; after which he made his son Jehoiakim, king, and imposed on him an annual tribute of 100 talents of silver and one talent of gold. He then proceeded against the king of Assyria; and weakened him so much, that the empire was soon after dissolved. Thus he became master of Syria and Phœnicia; but, in a short time, Nebuchadnezzar king of Babylon came against him with a mighty army. The Egyptian monarch, not daunted by the formidable appearance of his antagonist, boldly ventured a battle; but was overthrown with prodigious slaughter, and Nebuchadnezzar became master of all the country to the very gates of Pelusium. The reign of Apries, the Pharaoh Hophra of Scripture, presents us with a new revolution in the Egyptian affairs. He is said to have been a martial prince, and in the beginning of his reign very successful. He took by storm the rich city of Sidosi; and, having overcome the Cypriots and Phœnicians in a seafight, returned to Egypt laden with spoil. This success probably incited Zedekiah king of Judah to enter into an alliance with him against Nebuchadnezzar king of Babylon. The bad success of this alliance was foretold by the prophet Jeremiah; and accordingly it happened. For Nebuchadnezzar having sat down with his army before Jerusalem, Apries marched from Egypt to relieve the city; but no sooner did he perceive the Babylonians approaching him, than he retreated as fast as he could, leaving the Jews exposed to the rage of their merciless enemies: who were thereupon treated as Jeremiah had foretold: and by this step Apries brought upon himself the vengeance denounced by the same prophet. The manner in which these predictions were fulfilled is as follows: the Cyreneans, a colony of the Greeks, being greatly strengthened by a numerous supply of their countrymen under their third king Battus styled the Happy, and encouraged by the Pythian oracle, began to drive out their Libyan neighbours, and share their possessions among themselves. Hereupon Andican king of Libya sent a submissive embassy to Apries, and implored his protection against the Cyreneans. Apries complied with his request, and sent a powerful army to his relief. The Egyptians were defeated with great slaughter; and those who returned complained that the army had been sent off by Apries in order to be destroyed, that he might tyrannise without control over the rest of his subjects. This thought catching the attention of the people, an almost universal defection ensued. Apries sent Amasis, his chief minister, to bring them back to a sense of their duty. But while Amasis was haranguing and advising them to return to their allegiance, the people brought the ensigns of royalty and proclaimed him king. See Amasis. Apries then despatched one Patarbemis, with orders to take Amasis, and bring him alive before him. This he found impossible, and therefore returned without his prisoner; at which the king was so enraged, that he commanded Patarbemis's nose and ears to be cut off. This piece of cruelty completed his ruin; for when the rest of the Egyptians, who had continued faithful to Apries, beheld the inhuman mutilation of Patarbemis, they to a man deserted and went over to Amasis. Both parties now prepared for war; Amasis having under his command the whole body of native Egyptians; and Apries only those Ionians, Carians, and other mercenaries whom he could engage in his service. The army of Apries amounted only to 30,000, but, though greatly inferior in number to the troops of his rival, as he well knew that the Greeks were much superior in valor, he did not doubt of victory. Nay, so far was Apries puffed up with this notion, that he did not believe it was in the power even of any God to deprive him of his kingdom. The two armies soon met and drew up in order of battle near Memphis. A bloody engagement ensued; in which, though the army of Apries behaved with the greatest resolution, they were at last overpowered by numbers, and utterly defeated, the king himself being taken prisoner. Amasis now took possession of the throne without opposition. He confined Apries in one of his palaces, but treated him with great care and respect. The people, however, were implacable, and could not be satisfied while he enjoyed his life. Amasis, therefore, at last found himself obliged to deliver him into their hands. Thus the prediction received its final completion: Apries was delivered up to those who sought his life: and who no sooner had him in their power, than they strangled him, and laid his body in the sepulchre of his ancestors. During these intestine broils, which must have greatly weakened the kingdom, but most probably before the death of Apries, Nebuchadnezzar invaded Egypt. He had been for thirteen years before this employed in besieging Tyre, and at last had nothing but an empty city for his pains. To make himself some amends, therefore, he entered Egypt, harassed the country, killed and carried away great numbers of the inhabitants, so that the country did not recover from the effects of this incursion for a long time after. In this expedition, however, he seems not to have aimed at permanent conquest, but to have been induced to it merely by the love of plunder, of which he carried with him an immense quantity to Babylon. Some say he assisted Amasis against

Apries. During the reign of Amasis, Egypt is said to have flourished greatly, and to have contained 20,000 populous cities. That good order might be kept among such vast numbers of people, Amasis enacted a law, by which every Egyptian was bound once a year to inform the governor of his province by what means he gained his livelihood; and if he failed of this, to put him to death. The same punishment he decreed to those who could not give a satisfactory account of themselves. This monarch very much favored the Greeks, and married a queen of Grecian extraction. To many Greek cities, as well as particular persons, he made considerable presents. He also allowed the Greeks in general to come into Egypt, and settle either in the city of Naucratis, or carry on their trade upon the sea-coast; granting them also temples, and places where they might erect temples to their own deities. He received also a visit from Solon the celebrated Athenian lawgiver, and reduced the island of Cyprus under his subjection. The prosperity of Egypt, however, ended with the death of Amasis, or indeed before it. The Egyptian monarch had in some way incensed Cambyses king of Persia. The cause of the quarrel is uncertain; but, whatever it was, the Persian monarch vowed the destruction of Amasis. In the mean time Phanes of Halicarnassus, commander of the Grecian auxiliaries in the pay of Amasis, took some private disgust; and, leaving Egypt, embarked for Persia. He was a wise and able general, perfectly acquainted with every thing that related to Egypt; and had great credit with the Greeks in that country. Amasis was immediately sensible how great the loss of this man would be to him, and therefore sent after him a trusty eunuch with a swift galley. Phanes was accordingly overtaken in Lycia, but not brought back; for, making his guard drunk, he continued his journey to Persia, and presented himself before Cambyses, as he was meditating the overthrow of the Egyptian monarchy.

At this dangerous crisis also, the Egyptian monarch imprudently made Polycrates, tyrant of Samos, his enemy. This prince had hitherto been remarkable for an uninterrupted course of success; and Amasis, being at this time in strict alliance with him, wrote a letter, in which, after congratulating him on his prosperity, he told him that he was afraid lest his successes were too many, and that he might be suddenly overthrown. For this reason he advised him voluntarily to deprive himself of some portion of his happiness; and to cast away that which would grieve him most if he were accidentally to lose it. Polycrates followed his advice, and threw into the sea a signet of inestimable value. This, however, did not answer the intended purpose. The signet happened to be swallowed by a fish, which was taken a few days afterwards, and thus was restored to Polycrates. Of this Amasis was no sooner informed, than, considering Polycrates as really unhappy, and already on the brink of destruction, he resolved to put an end to the friendship which subsisted between them. For this purpose he despatched an herald to Samos, commanding him to acquaint Polycrates, that he renounced his alliance, and all the obligations between them; that he might not mourn his misfortunes with the sorrow of a friend. Polycrates now at liberty, therefore, to act against him, accordingly offered to assist Cambyses with a fleet of ships in his Egyptian expedition. Amasis had not, however, the misfortune to see the calamities of his country. He died about A.A.C. 525, after a reign of forty-four years; and left the kingdom to his son Psammenitus, just as Cambyses was approaching the frontiers of the kingdom. The new prince was scarce seated on the throne, when the Persians appeared. Psammenitus drew together what forces he could, to prevent them from entering the kingdom. Cambyses, however, immediately laid siege to Pelusium, and made himself master of it by the following stratagem: he placed in the front of his army a great number of cats, dogs, and other animals, that were deemed sacred by the Egyptians. He then attacked the city, and took it without opposition: the garrison, which consisted entirely of Egyptians, not daring to throw a dart or shoot an arrow against their enemies, lest they should kill some of the holy animals.

Cambyses had not long, however, taken possession of the city, when Psammenitus advanced against him with a numerous army. Before the engagement, the Greeks who served under Psammenitus, to shew their indignation against their treacherous countryman, Phanes, brought his children, it is said, into the camp, killed them in the presence of their father and of the two armies, and then drank their blood. The Persians, enraged at so cruel a sight, fell upon the Egyptians with the utmost fury, put them to flight, and cut the greatest part of them in pieces. Those who escaped fled to Memphis, where they were soon after guilty of a horrid outrage. Cambyses sent a herald to them in a ship from Mitylene: but no sooner did they see her come into the port, than they flocked down to the shore, destroyed the ship, and tore to pieces the herald and all the crew; afterwards carrying their mangled limbs into the city, in a kind of barbarous triumph. Not long after, they were obliged to surrender; Psammenitus thus falling into the hands of his inveterate enemy, now enraged beyond measure at the cruelties exercised upon the children of Phanes, the herald, and the Mitylenean sailors. The rapid success of the Persians struck with such terror the Libyans, Cyreneans, Barcæans, and other dependents or allies of the Egyptian monarch, that they immediately submitted. Nothing now remained but to dispose of the captive king, and revenge on him and his subjects the cruelties which they had committed. This the merciless victor executed in the severest manner. On the 10th day after Memphis had been taken, Psammenitus and the chief of the Egyptian nobility were ignominiously sent into one of the suburbs of that city Here the king being seated in a proper place, saw his daughter coming along in the habit of a slave with a pitcher to fetch water from the river, and followed by the daughters of the greatest families in Egypt, all in the same miserable garb,

with pitchers in their hands, drowned in tears, and loudly bemoaning their miserable situation. When the fathers saw their daughters in this distress, all but Psammenitus burst into tears; he only cast his eyes on the ground, and kept them fixed there. After the young women, came the son of Psammenitus, and 2000 of the young nobility, with bits in their mouths and halters round their necks, proceeding to execution. This was done to expiate the murder of the Persian herald and the Mitylenean sailors; for Cambyses caused ten of the Egyptians of the first rank to be publicly executed for every one of those that had been slain. Psammenitus, however, observed the same conduct as before, keeping his eyes stedfastly fixed on the ground, though all the Egyptians around him made the loudest lamentations. A little after this he saw an intimate friend and companion, now advanced in years, who, having been plundered of all he had, was begging his bread from door to door in the suburbs. Psammenitus now wept bitterly; and, calling out to his friend by name, struck himself on the head as if he had been frantic. Of this the spies who had been set over him to observe his behaviour, gave immediate notice to Cambyses, who sent to enquire into the cause of such immoderate grief. Psammenitus answered, that the calamities of his own family confounded him, and were too great to be lamented by any outward signs; but the extreme distress of a bosom friend gave more room for reflection, and therefore extorted tears from him. With this answer Cambyses was so affected, that he sent orders to prevent the execution of the king's son; but they came too late, for the young prince had been put to death before any of the rest. Psammenitus himself was then sent for into the city, and restored to his liberty: had he not indeed showed a desire of revenge, he might perhaps have been trusted with the government of Egypt; but, being discovered in some schemes against the government, he was seized, and condemned to drink bull's blood. The Egyptians were now reduced to the lowest degree of slavery. Their country became a province of the Persian empire; the body of Amasis their late king was taken out of his grave; and, after being mangled in a shocking manner, was finally burnt. But, what was felt as a still greater grievance, their god Apis was slain, and his priests ignominiously scourged: this inspired the whole nation with such a hatred to the Persians, that they could never afterwards be reconciled to them. As long however as the Persian empire subsisted, the Egyptians could never shake off their yoke. They frequently revolted indeed, but were always overthrown with loss. At last they submitted, without opposition, to Alexander the Great; after whose death, Egypt again became a powerful kingdom; but, from the conquest of it by Cambyses to the present time, it has never been governed but by foreign princes, agreeably to the prophecy of Ezekiel, 'There shall be no more a prince of the land of Egypt.'

On the death of Alexander the Great, Egypt, together with Libya, and that part of Arabia which borders on Egypt, was assigned to Ptolemy the son of Lagus, as governor, under Alexander's son by Roxana, who was then an infant. Nothing was farther from the intention of this governor, than to keep the provinces in trust for another. He did not, however, assume the title of king, till his authority was firmly established; and this did not happen till nineteen years after the death of Alexander, when Antigonus and Demetrius had unsuccessfully attempted the conquest of Egypt. From the time of his first establishment on the throne, Ptolemy, who had assumed the title of Soter, reigned twenty years; which added to the former nineteen, make up the thirty-nine years which historians commonly allow him to have reigned alone.—In the thirty-ninth year of his reign, he made his son, Ptolemy Philadelphus, partner in the empire; declaring him his successor, to the prejudice of his eldest son named Ceraunus; being excited thereto by his violent love for Berenice, Philadelphus's mother. Upon this, Ceraunus immediately quitted the court; and fled at last into Syria, where he was kindly received by Seleucus Nicator, whom he afterwards ungratefully murdered. The most remarkable transaction of this reign was the embellishing of Alexandria, which Ptolemy made the capital of his new kingdom. See ALEXANDRIA. Ptolemy Soter died about A.A.C. 284, in the forty-first year of his reign, and eighty-fourth of his age. He was the best prince of his race; and left behind him an example of prudence, justice, and clemency, which few of his successors followed. Besides the provinces originally assigned to him, he added to his empire those of Cælo Syria, Ethiopia, Pamphylia, Lycia, Caria, and some of the Cyclades. His successor, Ptolemy Philadelphus, added nothing to the extent of his empire; nor did he perform any thing remarkable except embellishing further the city of Alexandria, enriching its library, causing the Old Testament to be translated into Greek, (See BIBLE), and entering into an alliance with the Romans. In his time, Magas, the governor of Libya and Cyrene, revolted; and held these provinces as an independent prince, notwithstanding the utmost efforts of Ptolemy to reduce him. At last an accommodation took place; and a marriage was proposed between Berenice, the only daughter of Magas, and Ptolemy's eldest son. The young princess was to receive all her father's dominions by way of dowry, and thus they would again be brought under the dominion of Ptolemy's family. But, before this treaty could be put in execution, Magas died; and then Apamea, the princess's mother, did all she could to prevent the marriage. This, however, she was not able to do: but her efforts for that purpose produced a destructive war for four years with Antiochus Theos, king of Syria, and the acting of a bloody tragedy in the family of the latter. See SYRIA. About A. A C. 246 Ptolemy Philadelphus died; and was succeeded by his eldest son Ptolemy, who had been married to Berenice, the daughter of Magas. In the beginning of his reign, he found himself engaged in a war with Antiochus Theos king of Syria. From this he returned victorious, and brought with him 2500 statues and pictures,

among which were many of the ancient Egyptian idols, which had been carried away by Cambyses into Persia. These were restored by Ptolemy to their ancient temples; in memory of which favor, the Egyptians gave him the surname of Euergetes, or the Beneficent. In this expedition he greatly enlarged his dominions, making himself master of all the countries that lie between mount Taurus and the confines of India. An account of these conquests was given by himself, inscribed on a monument, to the following effect. 'Ptolemy Euergetes, having received from his father the sovereignty of Egypt, Libya, Syria, Phœnice, Cyprus, Lycia, Caria, and the other Cyclades, assembled a mighty army of horse and foot, with a great fleet, and elephants, out of Trogloditia and Ethiopia; some of which had been taken by his father, and the rest by himself, and brought thence, and trained up for war: with this great force he sailed into Asia; and having conquered all the provinces which lie on this side the Euphrates, Cilicia, Pamphylia, Ionia, the Hellespont, and Thrace, he crossed that river with all the forces of the conquered countries, and the kings of those nations, and reduced Mesopotamia, Babylonia, Susia, Persia, Media, and all the country as far as Bactria.' On the king's return from this expedition he passed through Jerusalem, where he offered many sacrifices to the God of Israel, and ever afterwards expressed a partiality for the Jewish nation. At this time the Jews were tributary to the Egyptian monarchs, and paid them annually twenty talents of silver. This tribute, however, Onias, who was then high priest, being of a very covetous disposition, had for a long time neglected to pay, so that the arrears amounted to a very large sum. Soon after his return, therefore, Ptolemy sent one of his courtiers, named Athenion to demand the money, and desired him to acquaint the Jews that he would make war upon them in case of a refusal. A young man, however, named Joseph, nephew to Onias, not only found means to avert the king's anger, but even got himself chosen his receiver general, and by his faithful discharge of that important trust, continued in high favor with Ptolemy as long as he lived. Ptolemy Euergetes having at last concluded a peace with Seleucus, the successor of Antiochus Theos, attempted the enlargement of his dominions on the south side. In this he was attended with such success, that he made himself master of all the coasts of the Red Sea, both on the Arabian and Ethiopian sides, quite down to the straits of Babel-mandel. On his return he was met by ambassadors from the Achæans, imploring his assistance against the Etolians and Lacedemonians. This the king readily promised them: but, they having in the mean time engaged Antigonus king of Macedon to support them, Ptolemy was so much offended that he sent powerful succours to Cleomenes III. king of Sparta; hoping, by that means, to humble both the Achæans and their new ally Antigonus. In this however he was disappointed; for Cleomenes, after having gained very considerable advantages over the enemy, was at last entirely defeated in the battle of Selasia, and obliged to take refuge in Ptolemy's dominions. He was received by the Egyptian monarch with the greatest kindness; a yearly pension of twenty-four talents was assigned him, with a promise of restoring him to the Spartan throne: but, before this could be accomplished, Ptolemy died, in the twenty-seventh year of his reign, and was succeeded by his son Ptolemy Philopater. Thus we have seen the Egyptian empire restored to a considerable height of power; and had the succeeding monarchs been careful to preserve its strength as transmitted to them by Euergetes, it is probable that Egypt might have been able to hold the balance against Rome, and after the destruction of Carthage to have prevented that haughty city from becoming mistress of the world. But after the death of Ptolemy Euergetes, the Egyptian empire, being governed either by weak monarchs, or wicked monsters, quickly declined, and from that time makes no conspicuous figure in history, except in the depravity of some of its kings, in which indeed, it may, vie with any nation

Ptolemy Philopater began his reign with the murder of his brother Magas; after which, giving himself up to universal licentiousness, the kingdom fell into anarchy. Cleomenes the Spartan king still resided at court; and, being now unable to bear the dissolute manners which prevailed there, he pressed Philopater to give him the assistance he had promised for restoring him to the throne of Sparta. This he the rather insisted upon, because he had received advice that Antigonus king of Macedon was dead, that the Achæans were engaged in a war with the Etolians, and that the Lacedemonians had joined the latter against the Achæans and Macedonians. Ptolemy, when afraid of his brother Magas, had indeed promised to assist the king of Sparta with a powerful fleet, hoping thus to attach him to his own interest: but now, when Magas was out of the way, it was determined by the king, or rather his ministers, that Cleomenes should not be assisted, nor even allowed to leave the kingdom; and this extravagant resolution produced the desperate attempt of Cleomenes, of which an account will be found in the history of SPARTA. Of the disorders which now ensued, Antiochus king of Syria, surnamed the Great, took the advantage, and attempted to wrest from Ptolemy the provinces of Cælo-Syria and Palestine. But in this he was finally disappointed; and might easily have been totally driven out of Syria, had not Ptolemy been too much taken up with his debaucheries to think of carrying on the war. The discontent occasioned by this piece of negligence soon produced a civil war in his dominions, and the whole kingdom continued in the utmost confusion till his death, which happened in the seventeenth year of his reign and thirty-seventh of his age. During the reign of Philopater happened a very extraordinary event with regard to the Jews, which is recorded in the third Book of Maccabees, chap. ii. iii. iv. v. The king of Egypt, while on his Syrian expedition, had attempted to enter the temple of Jerusalem; but, being hindered by the Jews, he was filled with the utmost rage against the whole nation. On his return to Alexandria, he resolved to make those who dwelt in that city feel the first effects of his vengeance. He began with publishing a

decree, which he caused to be engraved on a pillar erected for that purpose at the gate of his palace, excluding all those who did not sacrifice to the gods worshipped by the king. Thus the Jews were debarred from suing to him for justice or protection. By the favor of Alexander the Great, Ptolemy Soter, Philadelphus, and Euergetes, the Jews enjoyed at Alexandria the same privileges with the Macedonians In that metropolis the inhabitants were divided into three classes. In the first were the Macedonians, or original founders of the city, and along with them were enrolled the Jews; in the second were the mercenaries who had served under Alexander; and in the third the native Egyptians. Ptolemy now, to be revenged of the Jews, ordered that they should be degraded from the first rank, and enrolled among the native Egyptians; and that all of that nation should appear at an appointed time before the proper officers, to be enrolled among the people, that at the time of their enrolment they should have the mark of an ivy leaf, the badge of Bacchus, impressed with a hot iron on their faces; that all who were thus marked should be made slaves; and, lastly, that if any one should stand out against this decree, he should be immediately put to death. That he might not, however, seem an enemy to the whole nation, he declared, that those who sacrificed to his gods should enjoy their former privileges, and remain in the same class. Yet, notwithstanding this tempting offer, 300 only out of many thousand Jews who lived in Alexandria could be prevailed upon to abandon their religion in order to save themselves from slavery. The apostates were immediately excommunicated by their brethren: and this their enemies construed as done in opposition to the king's order; which threw the tyrant into such a rage, that he resolved to extirpate the whole nation, beginning with the Jews who lived in Alexandria and other cities of Egypt, and proceeding from thence to Judæa and Jerusalem itself. In consequence of this cruel resolution, he commanded all the Jews that lived in any part of Egypt to be brought in chains to Alexandria, and there to be shut up in the Hippodrome, which was a very spacious place without the city, where the people used to assemble to see horse-races and other public diversions. He then sent for Herman master of the elephants; and commanded him to have 500 of these animals ready against the next day, to let loose upon the Jews in the Hippodrome. But when the elephants were prepared for the execution, and the people were assembled in great crowds to see it, they were for that and the succeeding day disappointed by the king's absence. At last he came to the Hippodrome attended with a vast multitude of spectators; but, when the elephants were let loose, instead of falling upon the Jews, they turned their rage against the spectators and soldiers, and destroyed great numbers of them. At the same time, some frightful appearances which were seen in the air so terrified the king, that he commanded the Jews to be immediately set at liberty, and restored them to their former privileges. No sooner were they delivered from this danger than they demanded leave to put to death such of their nation as had abandoned their religion; which being granted, they despatched the 300 apostates. Philopater was succeeded by Ptolemy Epiphanes; and he, after a reign of twenty-four years, by Ptolemy Philometor. In the beginning of his reign, a war commenced with the king of Syria, who had seized on the provinces of Cælo-Syria and Palestine in the preceding reign. In the course of this war, Philometor was either voluntarily delivered up to Antiochus, or taken prisoner. But, however this was, the Alexandrians, despairing of his ever being able to recover his liberty, raised to the throne his brother Ptolemy, who took the name of Euergetes II. but was afterwards called Physcon, or the big-bellied, on account of the extraordinary size of his person, through gluttony and luxury. He was scarcely seated on the throne, however, when Antiochus Epiphanes, returning into Egypt, drove out Physcon, and restored the whole kingdom, except Pelusium, to Philometor. His design was to kindle war betwixt the two brothers, so that he might have an opportunity of seizing the kingdom. For this reason he kept to himself the city of Pelusium; by which, being the key of Egypt, he might at his pleasure re-enter the country. But Philometor, apprised of his design, invited his brother Physcon to an accommodation, which was happily effected by their sister Cleopatra. The brothers agreed to reign jointly, and to oppose to the utmost of their power Antiochus, whom they considered as a common enemy. On this the king of Syria invaded Egypt with a great army, but was prevented by the Romans from conquering it. The two brothers were no sooner freed from the apprehension of a foreign enemy, than they began to quarrel with each other. Their differences soon came to such a height, that the Roman senate interposed. But, before the ambassadors employed to enquire into the merits of the cause could arrive in Egypt, Physcon had driven Philometor from the throne, and obliged him to quit the kingdom. On this the dethroned prince fled to Rome, where he appeared meanly dressed, and without attendants. He was very kindly received by the senate; who were so well satisfied of the injustice done him, that they immediately decreed his restoration. He was reconducted home accordingly; and, on the arrival of the ambassadors in Egypt, an accommodation was negociated, whereby Physcon was put in possession of Libya and Cyrene, and Philometor of all Eygpt and the island of Cyprus; each of them being declared independent of the other. The treaty, as usual, was confirmed with oaths and sacrifices, and was broken almost as soon as made. Physcon was dissatisfied with his share of the dominions; and therefore sent ambassadors to Rome, desiring that the island of Cyprus might be added to his other possessions. This could not be obtained by the ambassadors; Physcon therefore went to Rome in persou. His demand was evidently unjust; but the Romans, considering it their interest to weaken the power of Egypt as much as possible, adjudged the island to him. Physcon set out from Rome with two ambassadors; and, arriving in Greece on his way to Cyprus, he raised there a great number of mercenaries, with a design to sail im-

mediately to that island and conquer it. But the Roman ambassadors telling him that they were commanded to put him in possession of it by fair means and not by force, he dismissed his army, and returned to Libya, while one of the ambassadors proceeded to Alexandria. Their design was to bring the two brothers to an interview on the frontiers of their dominions, and there to settle matters amicably. But the ambassador who went to Alexandria, found Philometor very averse from compliance with the decree of the senate. He put off the ambassador so long, that Physcon sent the other also to Alexandria, hoping that the joint persuasions of the two would induce Philometor to comply. But the king, after entertaining them at an immense charge for forty days, at last refused to submit, and told the ambassadors that he was resolved to adhere to the first treaty. With this answer the Roman ambassadors departed, and were followed by others from the two brothers. The senate, however, not only confirmed their decree in favor of Physcon, but renounced their alliance with Philometor, and commanded his ambassador to leave the city in five days. In the mean time the inhabitants of Cyrene having heard unfavorable accounts of Physcon's behaviour, during the short time he reigned in Alexandria, conceived so strong an aversion against him, that they resolved to keep him out of their country by force of arms. On receiving intelligence of this resolution, Physcon dropped all thoughts of Cyprus for the present, and hastened with all his forces to Cyrene, where he soon established himself in the kingdom. His vicious and tyrannical conduct, however, increased the aversion of the Cyrenians so much, that some of them, entering into a conspiracy against him, fell upon him one night as he was returning to his palace, wounded him in several places, and left him for dead on the spot. This he laid to the charge of his brother Philometor; and, as soon as he was recovered, took another voyage to Rome. Here he made his complaints to the senate, and showed them the scars of his wounds, accusing his brother of having employed assassins to murder him. Though Philometor was known to be a man of a most humane and mild disposition, and therefore very unlikely to have been concerned in so black an attempt, yet the senate, being offended at his refusing to submit to their decree concerning Cyprus, hearkened to this false accusation, and not only refused to hear what his ambassadors had to say, but ordered them immediately to depart from the city. At the same time they appointed five commissioners to conduct Physcon into Cyprus, and put him in possession of that island, enjoining all their allies in those parts to supply him with forces. Physcon having thus got together an army, which seemed to be sufficient for the accomplishment of his design, landed in Cyprus; but, being there encountered by Philometor in person, he was entirely defeated, and obliged to shelter himself in the city called Lapitho. Here he was closely besieged, and at last obliged to surrender. Every one now expected that Physcon would have been treated as he deserved; but his brother, instead of punishing, restored him to the government of Libya and Cyrene, adding some other territories instead of the island of Cyprus, and promising him his daughter in marriage. Thus an end was put to the war between the two brothers, for the Romans were ashamed any longer to oppose a prince who had given such a signal instance of his justice and clemency. On his return to Alexandria, Philometor appointed one Archias governor of Cyprus. But he, soon after the king's departure, agreed with Demetrius, king of Syria, to betray the island to him for 500 talents. The treachery was discovered before it took effect; and the traitor, to avoid the punishment due to his crime, killed himself. Ptolemy, being offended with Demetrius for this attempt on Cyprus, joined Attalus, king of Pergamus, and Ariarathes, king of Cappadocia, in setting up a pretender to the crown of Syria. This was Alexander Balas, to whom he even gave his daughter Cleopatra in marriage, after he had placed him on the throne of Syria. But he, notwithstanding these and many other favors, being suspected of having entered into a plot against his benefactor, Ptolemy became his greatest enemy; and, marching against him, routed his army in the neighbourhood of Antioch. He did not, however, long enjoy his victory; for he died in a few days after the engagement, of the wounds he had received.

On the death of Philometor, Cleopatra, the queen, designed to secure the throne for her son. But some of the principal nobility declaring for Physcon, a civil war was about to ensue, when matters were compromised, on condition that Physcon should marry Cleopatra, that he should reign jointly with her during his life, and declare her son by Philometor, heir to the crown. These terms were no sooner agreed upon than Physcon married Cleopatra, and on the very day of the nuptials, murdered her son in her arms. This was only a prelude to the cruelties which he afterwards committed on his subjects. He first put to death all those who had shown any concern for the murder of the young prince. He then wreaked his fury on the Jews, whom he treated more like slaves than subjects, on account of their having favored the cause of Cleopatra. His own people were treated with little more ceremony. Numbers of them were every day put to death for the smallest faults, and often for no fault at all, but merely to gratify his inhuman temper. His cruelty towards the Alexandrians is related under the article ALEXANDRIA. He divorced his queen, who was also his sister, and married her daughter, who was likewise called Cleopatra, and whom he had previously ravished. In short, his behaviour was so exceedingly wicked, that it soon became quite intolerable to his subjects; and he was obliged to fly to the island of Cyprus with his new queen, and Memphitis, a son he had by her mother. On the flight of the king, the divorced queen was placed on the throne by the Alexandrians; but Physcon, fearing lest a son whom he had left behind should be appointed king, sent for him into Cyprus, and caused him to be assassinated as soon as he landed. This provoked the people against him to such a degree, that they pulled down and dashed to pieces all the statues which

had been erected to him in Alexandria. This the tyrant supposed to have been done at the instigation of the queen, and therefore resolved to revenge it on her by killing his own son whom he had by her. He therefore, without the least remorse, caused the young prince's throat to be cut; and, having put his mangled limbs into a box, sent them as a present to his mother Cleopatra. The messenger with whom this box was sent, was one of his guards. He was ordered to wait till the queen's birth day, which approached, and was to be celebrated with extraordinary pomp; and, in the midst of the general rejoicing, he was to deliver the present. The horror and detestation occasioned by this unparalleled piece of barbarity cannot be expressed. An army was soon raised, and the command of it given to one Marsyas, whom the queen had appointed general, and enjoined to take all the necessary steps for the defence of the country. On the other hand, Physcon having hired a numerous body of mercenaries, sent them, under the command of Hegelochus, against the Egyptians. The two armies met on the frontiers of Egypt, and a bloody battle ensued, wherein, however, the Egyptians were entirely defeated, and Marsyas was taken prisoner. Every one expected that the captive general would have been put to death with the severest torments; but Physcon, perceiving that his cruelties only exasperated the people, resolved to try whether he could regain their affections by lenity; and therefore pardoned Marsyas, and set him at liberty. Cleopatra, being greatly distressed by this overthrow, demanded assistance from Demetrius, king of Syria, who had married her eldest daughter by Philometor, promising him the crown of Egypt for his reward. Demetrius accepted the proposal, marched with all his forces into Egypt, and laid siege to Pelusium. But he being no less hated in Syria than Physcon was in Egypt, the people of Antioch, taking advantage of his absence, revolted against him, and were joined by most of the other cities in Syria. Thus Demetrius was obliged to return; and Cleopatra, being now in no condition to oppose Physcon, fled to Ptolemais, where her daughter the queen of Syria resided. Physcon was then restored to the throne of Egypt, which, notwithstanding his crimes, he enjoyed till his death, which happened at Alexandria, in the twenty-ninth year of his reign, and sixty-seventh of his age.

To Physcon succeeded Ptolemy Lathyrus, about A.A.C. 122; but he had not reigned long before his mother, finding that he would not be entirely governed by her, instigated the Alexandrians, to drive him from the throne, and place on it his youngest brother, Alexander. Lathyrus, after this, was obliged to content himself with the government of Cyprus, which he was permitted to enjoy in quiet. Ptolemy Alexander, in the mean time, finding he was to have only the shadow of sovereignty, and that his mother Cleopatra was to have all the power, stole away privately from Alexandria. The queen used every artifice to bring him back, well knowing that the Alexandrians would never suffer her to reign alone. At last her son yielded to her intreaties; but soon after, understanding that she had hired assassins to despatch him, he caused her to be murdered. The death of the queen was no sooner known to the Alexandrians, than, disdaining to be commanded by a parricide, they drove out Alexander, and recalled Lathyrus. The deposed prince for some time led a rambling life in the island of Cos, but, having got together some ships, he, the next year, attempted to return into Egypt. But being met by Tyrrhus, Lathyrus's admiral, he was defeated, and obliged to fly to Myra in Lycia. From Myra he steered towards Cyprus, hoping that the inhabitants would place him on the throne, instead of his brother. But Charcas, another of Lathyrus's admirals, coming up with him while he was ready to land, an engagement ensued, in which Alexander's fleet was dispersed, and himself killed. During these disturbances, Apion, king of Cyrenaica, the son of Ptolemy Physcon by a concubine, having maintained peace and tranquillity in his dominions during a reign of twenty-one years, died, and by his will left his kingdom to the Romans: and thus the Egyptian empire was again considerably reduced and circumscribed. Lathyrus, being now delivered from all competitors, turned his arms against the city of Thebes, which had revolted from him. He marched in person against the rebels; and, having defeated them in a pitched battle, laid close siege to their city. The inhabitants defended themselves with great resolution for three years, but were at last obliged to submit, and the city was given up to be plundered by the soldiers. They left every where the most melancholy monuments of their avarice and cruelty; so that Thebes, which till that time had been one of the most wealthy cities of Egypt, was now reduced so low that it never afterwards made any figure. About A.A.C. 76, Ptolemy Lathyrus was succeeded by Alexander II. the son of Ptolemy Alexander I. He was first sent by Cleopatra into the island of Cos, with a great sum of money, and all her jewels, as thinking that the safest place where they could be kept. When Mithridates, king of Pontus, made himself master of that island, the inhabitants delivered up to him the young Egyptian prince, together with all the treasures. Mithridates gave him an education suitable to his birth; but he, not thinking himself safe with a prince who had shed the blood of his own children, fled to the camp of Sylla, the Roman dictator, who was then making war in Asia. From that time he lived in the family of the Roman general, till news was brought to Rome of the death of Lathyrus. Sylla then sent him to Egypt to take possession of the throne. But, before his arrival, the Alexandrians had chosen Cleopatra for their sovereign. To compromise matters, however, it was agreed that Alexander should marry her, and take her for his partner on the throne. This was accordingly done; but nineteen days after the marriage he murdered her, and for fifteen years afterwards showed himself such a monster of wickedness, that a general insurrection at last ensued among his subjects, and he was obliged to fly to Pompey the Great, who was then carrying on the war against Mithridates king of Pontus. But Pompey refusing to concern himself in the matter, he retired to Tyre,

there he died a few months after. Alexander, while he was in Tyre, had sent ambassadors to Rome to influence the senate in his favor. But, lying before the negociation was finished, he made over by his last will all his rights to the Roman people, declaring them heirs to his kingdom: not out of any affection to the republic, but with a view to raise disputes between the Romans, and his rival Auletes, whom the Egyptians had placed on the throne. The will was brought to Rome, where it occasioned warm debates. Some were for taking immediate possession of Egypt. Others thought no notice should be taken of such a will, because Alexander had no right to dispose of his dominions in prejudice to his successor, and to exclude from the crown those who were of the royal blood of Egypt. Cicero represented, that such a notorious imposition would debase the majesty of the Roman people, and involve them in endless wars and disputes; that the fruitful fields of Egypt would be a strong temptation to the avarice of the people, who would insist on their being divided among them; and lastly, that by this means the bloody quarrels about the Agrarian laws would be revived. These reasons had some weight with the senate; but what chiefly prevented them from seizing on Egypt at this time was, that they had lately taken possession of the kingdom of Bithynia, in virtue of the will of Nicomedes; and of Cyrene and Lybia, by the will of Apion. They thought, therefore, that if they should, on the like pretence, take possession of the kingdom of Egypt, this might too much expose their design of setting up a kind of universal empire, and occasion a formidable combination against them. Ptolemy Auletes, who was now raised to the throne by the Egyptians, is said to have surpassed all the kings that went before him in the effeminacy of his manners. The surname Auletes, which signifies the flute-player, was given him because he piqued himself on his skill in performing upon that instrument, and was not ashamed even to contend for the prize in the public games. He took great pleasure in imitating the manners of the bacchanals; dancing in a female dress, and in the same measures that they used during the solemnity of their god; and hence he had the surname of the New Dionysius, or Bacchus. As his title to the crown was disputable, he being only the son of a concubine, his first care was to get himself acknowledged by the Romans, and declared their ally. This was obtained by applying to Julius Cæsar, who was at that time consul, and immensely in debt. Cæsar being glad of such an opportunity of raising money, made the king of Egypt pay pretty dear for his alliance: 6000 talents, a sum equal to £1,162,500 sterling were given partly to Cæsar himself, and partly to Pompey, whose interest was necessary for obtaining the consent of the people. Though the revenues of Egypt amounted to twice this sum, yet Auletes found it impossible for him to raise it without severely taxing his subjects. This occasioned a general discontent; and, while the people were almost ready to take up arms, a most unjust decree passed at Rome for seizing the island of Cyprus. When the Alexandrians heard of this, they pressed Auletes to demand that island as an ancient appendage of Egypt; and, in case of a refusal, to declare war against that haughty and imperious people, who they now saw, though too late, aimed at nothing less than the sovereignty of the world. With this request the king refused to comply; upon which his subjects, already provoked beyond measure at the taxes with which they were loaded, flew to arms, and surrounded the palace. The king had the good fortune to escape their fury, and immediately leaving Alexandria, set sail for Rome. In his way to that city, he landed on the island of Rhodes, where the celebrated Cato at that time was, being on his way to Cyprus, to put the unjust decree of the senate into execution. Auletes, desirous to confer with a man of his prudence, immediately sent to acquaint him with his arrival. He imagined that, upon this notice, Cato would instantly come and wait upon him; but the proud Roman told the messenger, that if the king of Egypt had any thing to say to Cato, he might come to his house. Accordingly the king went to pay him a visit; but was received with very little ceremony, Cato not even vouchsafing to rise out of his seat when he came into his presence. When Auletes had laid his affairs before this haughty republican, he was blamed by him for leaving Egypt, the richest kingdom in the world, in order to expose himself, as he said, to the indignities he would meet with at Rome. There, Cato told him, nothing was in request but wealth and grandeur. All the riches of Egypt, he said, would not be sufficient to satisfy the avarice of the leading men in Rome. He, therefore, advised him to return to Egypt; and strive, by a more equitable conduct, to regain the affections of his people. He even offered to reconduct him thither, and employ his good offices in his behalf. But though Ptolemy was sensible of the propriety of this advice, the friends he had with him dissuaded him from following it, and accordingly he set out for Rome. On his arrival, he found, to his great concern, that Cæsar, in whom he confided, was then in Gaul. He was received, however, by Pompey with great kindness. He assigned him an apartment in his own house, and omitted nothing that lay in his power to serve him. Notwithstanding this protection, however, the Egyptian monarch was obliged to go from house to house like a private person, soliciting the votes of the senators. After he had spent immense treasures in procuring a strong party, he was at last permitted to lay his complaints before the senate; but, at the same time, there arrived an embassy from the Alexandrians, consisting of 100 citizens, to acquaint the senate with the reasons of their revolt. When Auletes first set out for Rome, the Alexandrians, not knowing what was become of him, placed on the throne his daughter Berenice; and sent an embassy into Syria to Antiochus Asiaticus, inviting him into Egypt to marry the queen, and reign in partnership with her. Antiochus was dead before the arrival of the ambassadors; upon which, the same proposal was made to his brother Seleucus, who readily accepted it. This Seleucus is described by Strabo as monstrously deformed in body, and

still more so in mind. The Egyptians nicknamed him Cybiosactes, or the Scullion. He was scarcely on the throne, when he gave a signal instance of his avaricious temper. Ptolemy I. had caused the body of Alexander the Great to be deposited in a coffin of massy gold. This the king seized upon; and thus provoked his wife Berenice to such a degree, that she caused him to be murdered. She then married one Archelaus, the high priest of Comana in Pontus, who pretended to be the son of Mithridates the Great; but was, in fact, only the son of that monarch's general. Auletes was not a little alarmed on hearing of these transactions, especially when the ambassadors arrived, who he feared would overturn all the schemes he had labored so much to bring about. The embassy was headed by one Dion, a celebrated academic philosopher, who had many powerful friends at Rome. But Ptolemy found means to get both him and most of his followers assassinated; and this intimidated the rest to such a degree, that they durst not execute their commission, or, for some time, even demand justice for the murder of their colleagues. The report of so many murders, however, at last spread a general alarm. Auletes, sure of the protection of Pompey, did not scruple to own himself the perpetrator of them. Nay, though an action was commenced against one Ascitius, an assassin, who had stabbed Dion, the chief of the embassy above mentioned, and the crime was fully proved, yet he was acquitted by the venal judges, who had all been bribed by Ptolemy. In a short time, the senate passed a decree, by which it was enacted, that the king of Egypt should be restored by force of arms. All the great men in Rome were ambitious of this commission; which, they well knew, would be attended with immense profit. Their contests, on this occasion, took up a considerable time; but at last a prophecy of the Sybil was found out, which forbade the assisting an Egyptian monarch with an army. Ptolemy, therefore, wearied out with so long a delay, retired from Rome, where he had made himself generally odious, to the temple of Diana, at Ephesus, there to wait the decision of his fate. Here he remained a considerable time; but as he saw that the senate came to no resolution, though he solicited them by letters, he at last, by Pompey's advice, applied to Gabinius, the proconsul of Syria, a man of most infamous character, and ready to undertake any thing for money. Therefore, though it was contrary to an express law, for any governor to leave his province, without positive orders from the senate and people of Rome, Gabinius ventured to transgress this law, upon condition of being well paid. As a recompense for his trouble, he demanded 10,000 talents; that is, £1,937,500 sterling; and Ptolemy, glad to be restored on any terms, agreed to pay that sum: but Gabinius would not stir till he had received one-half of it. This obliged the king to borrow it from a Roman knight, named Caius Rabirius Posthumus; Pompey interposing his credit and authority for the repayment both of capital and interest. Gabinius now set out for Egypt, attended by the famous Marc Anthony, who at this time served in the army under him. He was met by Archelaus, who, since the departure of Auletes, had reigned in Egypt jointly with Berenice, at the head of a numerous army. In the first engagement the Egyptians were utterly defeated, and Archelaus taken prisoner. Thus Gabinius might have put an end to the war at once; but his avarice prompted him to dismiss Archelaus, on his paying a considerable ransom; after which, pretending that he had made his escape, fresh sums were demanded from Ptolemy for defraying the expenses of the war. For these Ptolemy was again obliged to apply to Rabirius, who would only supply what he wanted at a very high interest. At last, Archelaus was defeated and killed, and Ptolemy again became master of all Egypt. No sooner was he firmly settled on the throne, than he put to death his daughter Berenice, and cruelly oppressed his people in order to procure the money he had been obliged to borrow while in exile. These oppressions and exactions the cowardly Egyptians bore with great patience, being intimidated by the garrison which Gabinius had left in Alexandria. But neither the fear of the Romans, nor the authority of Ptolemy, could make them put up with an affront offered to their religion. A Roman soldier happened to kill a cat, an animal held sacred, and even worshipped by the Egyptians; and, no sooner was this sacrilege known, than the Alexandrians made a general insurrection, and, gathering together in crowds, made their way through the Roman guards, dragged the soldier out of his house, and, in spite of all opposition, tore him in pieces. Notwithstanding the heavy taxes, which Ptolemy laid on his people, it does not appear that he had any design of paying his debts. Rabirius, who, as we have already observed, had lent him immense sums, finding that the king affected delays, took a voyage to Egypt, to expostulate with him in person. Ptolemy excused himself on account of the bad state of his finances, but offered to make Rabirius collector-general of his revenues, that he might, in that employment, pay himself, an offer which Rabirius gladly accepted. But Ptolemy, soon after, upon some frivolous pretence or other, caused him and all his servants, to be closely confined. This base conduct exasperated Pompey as much as Rabirius; for the former had been in a manner security for the debt, as the money had been lent at his request, and the business transacted at a country-house of his near Alba. However, as Rabirius had reason to fear still worse treatment, he took the first opportunity of making his escape.

To complete his misfortunes, he was prosecuted at Rome as soon as he returned, 1. For having enabled Ptolemy to corrupt the senate with sums lent him for that purpose. 2. For having debased and dishonored the character of a Roman knight, by farming the revenues, and becoming the servant of a foreign prince. 3. For having been an accomplice with Gabinius, and sharing with him the 10,000 talents, which that proconsul had received for his Egyptian expedition.

r the eloquence of Cicero he was acquitted; d one of the best orations to be found in the itings of that author, was composed on this casion. Gabinius was also prosecuted; and, Cicero spoke against him, he very narrowly caped death. He was, however, condemned to rpetual banishment, after having been stripped all he was worth; and lived in exile till the ne of the civil wars, when he was recalled by esar, in whose service he lost his life. Auletes joyed the throne of Egypt about four years er his re-establishment; and, at his death, t his children, a son and two daughters, der the tuition of the Roman people. The me of the son was Ptolemy, those of the ughters were Cleopatra and Arsinoe. This is the Cleopatra who afterwards became so faous, and had so great a share in the civil wars Rome. As the transactions of that queen's ign, however, are so closely connected with the fairs of Rome, that they cannot be well underood without knowing the situation of the Romans at that time, we refer for an account of em to the history of Rome. With Cleopatra ded the family of Ptolemy Lagus, the founder the Grecian empire in Egypt, after it had held at country in subjection for the space of 294 ars.

Egypt now became a province of the Roman npire, and continued subject to the emperors Rome or Constantinople. In the year 642 was conquered by the Arabs under Amru bn Al As, one of the generals of the khalif mar. In 889 an independent government was t up in this kingdom by Ahmed Ebn Tolun, ho rebelled against Al Mokhadi, khalif of agdad. It continued to be governed by him nd his successors for twenty-seven years, when was again reduced by Al Moctasi khalif of agdad. In about thirty years after, we find it gain an independent state, being joined with yria under Mahomet Ebn Taj, who had been appointed governor of these provinces. This governent, however, was also but short-lived; for in 963 was conquered by Jawhar, one of the generals f Moez Ledinillah, the Fatemite khalif of Cairvan in Barbary. No sooner was Moez informed f the success of his general, than he prepared vith all expedition to go and take possession of is new conquest. Accordingly, he ordered all he vast quantities of gold which he and his predecessors had amassed, to be cast into ingots f the size and figure of mill-stones used in and-mills, and conveyed on camels' backs into Egypt. To show that he was fully determined o abandon his dominions in Barbary, and to nake Egypt the royal residence, he caused the emains of the three former princes of his race to e removed from Cairwan in Barbary, and to be deposited in a stately mosque erected on purpose n the city of Cairo: the most effectual perhaps f all methods to induce his successors to reside n Egypt also, as it was become an established custom among those princes, frequently to pay their respectful visits to the tombs of their ancestors. To establish himself the more effectually in his new dominions, Moez suppressed the usual prayers made in the mosques for the khalifs of Bagdad, and substituted his own name in their stead. This was complied with, not only in Egypt and Syria, but even throughout all Arabia, the city of Mecca alone excepted. The consequence was, a schism in the Mahommedan faith, which continued upwards of 200 years, and was attended with continual anathemas, and sometimes destructive wars between the khalifs of Bagdad and those of Egypt. Having fully established himself in his kingdom, he died in the forty-fifth year of his age, three years after he had left his dominions in Barbary; and was succeeded by his son Abu Al Mansur Barar, surnamed Aziz Billah.

The new khalif succeeded at the age of twenty-one; and committed the management of affairs entirely to the care of Jawhar, his father's long experienced general and prime minister. In 978 he sent this famous warrior to drive out Al Aftekin, the emir of Damascus. The Egyptian general accordingly undertook the siege of that place; but, at the end of two months, was obliged to raise it, on the approach of an army of Karmatians under the command of Al Hakem. As Jawhar was not strong enough to venture an engagement with these Karmatians, it was impossible for him to hinder them from effecting a junction with the forces of Al Aftekin. He therefore retreated, or rather fled towards Egypt with the utmost expedition; but, being overtaken by the two confederate armies, was soon reduced to the last extremity, He was, however, permitted to resume his march, on condition that he passed under Al Aftekin's sword and Al Hakem's lance; and to this disgraceful condition Jawhar found himself obliged to submit. On his arrival in Egypt, he immediately advised Al Aziz to undertake an expedition in person into the east, against the combined army of the Turks, Karmatians, and Damascenes, under the command of Al Aftekin and Al Hakem. The khalif followed his advice; and advancing against his enemies overthrew them with great slaughter; Al Aftekin himself escaped out of the battle, but was afterwards taken and brought to Al Aziz who made him his chamberlain, and treated him with great kindness. Jawhar, in the mean time, was disgraced on account of his bad success; and in this disgrace he continued till his death, which happened A. D. 990, and in the year of the Hegira 381. This year Al Aziz having received advice of the death of Saadoddawla, prince of Aleppo, sent a formidable army under the command of a general named Manjubekin, to reduce that place. Lulu, who had been appointed guardian to Saadoddawla's son, finding himself pressed by the Egyptians, who carried on the siege with great vigor, demanded assistance from the Greek emperor. Accordingly, he ordered a body of troops to advance to Lulu's relief, when Manjubekin, being informed of their approach, immediately raised the siege, and advanced to give them battle. An obstinate engagement ensued, in which the Greeks were at last overthrown with great slaughter. After this victory, Manjubekin pushed on the siege of Aleppo very briskly; but finding the place capable of defending itself much longer than he at first imagined, and his provisions beginning to fail, he raised the siege. The khalif upon this sent him a very threatening letter and commanded him to return before Aleppo

He did so; and continued the siege for thirteen months; during all which time it was defended by Lulu with incredible bravery. At last the Egyptians, hearing that a numerous army of Greeks was on their way to relieve the city, raised the siege, and fled with the utmost precipitation. The Greeks then took and plundered several of the cities which Al Aziz possessed in Syria; and Manjubekin made the best of his way to Damascus, where he declared himself independent. Aziz, informed of this revolt, marched in person against him with a considerable army; but, being taken ill by the way, he expired in the twenty-first year of his reign and forty-second of his age. Aziz Billah was succeeded by his son Abu Al Mansur, surnamed Al Hakem; who, being only eleven years of age, was put under the tuition of an eunuch of approved integrity. This reign is remarkable for nothing so much as the madness with which the khalif was seized at the latter part of it. This first manifested itself by his issuing many preposterous edicts; but at length grew to such a height, that he fancied himself a god, and found no fewer than 16,000 persons who owned him as such. These were mostly the Dararians, a new sect sprung up about this time, and so called from their chief Mohammed Ebn Ishmael, surnamed Darari. He is supposed to have inspired the khalif with this impious notion; and, as Darari set up for a second Moses, he did not scruple to assert that Al Hakem was the great Creator of the universe! For this reason, a zealous Turk stabbed him in the khalif's chariot. His death was followed by a three days' uproar in the city of Cairo, during which Darari's house was pulled down, and many of his followers massacred. The sect, however, did not expire with its author. He left behind him a disciple named Hamza, who, being encouraged by the mad khalif, spread it through his dominions. This was quickly followed by an abrogation of all the Mahommedan fasts, festivals, and pilgrimages, the grand one to Mecca in particular; so that the zealous Mahommedans were now greatly alarmed, as justly supposing that Al Hakem designed entirely to suppress the worship of the true God, and introduce his own in its place. From this apprehension, however, they were delivered by the death of the khalif; who was assassinated, by a contrivance of his own sister, A. D. 1020. Al Hakem was succeeded by his son Al Thaher, who reigned fifteen years; and left the throne to a son under seven years of age, named Al Mostanser Billah. In the year 1041, a revolt happened in Syria; but Al Mostanser having sent a powerful army into that country, under the command of one Anushtekin, he not only reduced the rebels, but considerably enlarged the Egyptian dominions in Syria. In 1054 a Turk named Al Bassasiri, having quarelled with the vizier of Al Kayem, khalif of Bagdad, fled to Egypt and put himself under the protection of Al Mostanser. The latter, imagining this would be a favorable opportunity for enlarging his dominions, and perhaps seizing on the city of Bagdad, supplied Bassasiri with money and troops. By this assistance he was enabled to possess himself of Arabian Irak, and ravaged that province to the very gates of Bagdad. On this, Al Kayem wrote to Togrol Beg, or Tangrolipix, the Turkish sultan, to come to his assistance. The sultan immediately complied, and soon after arrived at Bagdad with a formidable army and eighteen elephants. Of this Bassasiri gave notice to Al Mostanser, and intreated him to exert himself further for his support against so powerful an enemy. This was accordingly done, but nothing worthy of notice happened till 1058, when Bassasiri having excited Ibrahim the sultan's brother to revolt, Togrol Beg was obliged to employ all his force against him. This gave Bassasiri an opportunity of seizing on the city of Bagdad; and the unfortunate khalif, according to some, was taken prisoner, or, according to others, fled. Bassasiri, on his entry, caused Al Mostanser to be immediately proclaimed khalif in all quarters of the city. Al Kayem's vizier he caused to be led on a camel through the streets of Bagdad, dressed in a woollen gown, with a high red bonnet, and a leathern collar about his neck; a man lashing him behind. Then being sewed up in a bull's hide, with the horns placed over his head, and hung upon hooks, he was beaten without ceasing till he died. The imperial palace was plundered, and the khalif himself detained a close prisoner. This success was but short lived; for, in 1056, Togrol Beg defeated his brother Ibrahim, took him prisoner and strangled him. He then marched to Bagdad, which Bassasiri abandoned at his approach. Here the khalif Al Kayem was delivered up by Mahras, the governor of a city called Haditha, who had the charge of him; and was immediately restored to his dignity: which Bassasiri no sooner understood, than he again advanced towards the city. Against him Togrol Beg sent a part of his army under some of his generals, while he himself followed with the rest. A battle ensued, in which the army of Bassasiri was defeated, and he himself killed. His head was brought to Togrol Beg, who caused it to be carried on a pike through the streets of Bagdad. Thus the hopes of Al Mostanser were entirely frustrated; and from this period we may date the declension of the Egyptian empire under the khalifs. They had made themselves masters of almost all Syria; but no sooner was Bassasiri's bad success known, than the younger part of the citizens of Aleppo revolted, and set up Mahmud Azzoddawla, who immediately laid siege to the citadel. Al Mostanser sent a powerful army against him, which Azzoddawla entirely defeated, and took the general himself prisoner: soon after this he made himself master both of the city and citadel, with all their dependencies. In his new dominions he behaved with the greatest cruelty, destroying every thing with fire and sword, and making frequent incursions into the neighbouring provinces, which he treated in the same manner. This disaster was soon followed by others still more terrible. In 1066 a famine raged over all Egypt and Syria, with such fury, that dogs and cats were sold for four or five Egyptian dinars each, and other provisions in proportion. Multitudes of people died in Cairo for want of food. Nay, so great was the scarcity, that the vizier had but one servant left who was able to attend him to the khalif's palace, and to whom he gave the

care of his horse when he alighted at the gate. But, at his return, he was surprised to find that the horse had been carried off, killed, and eaten by the famished people. Complaining of this to the khalif, he caused three of them who had carried off the horse to be hanged. Next day, however, he was still more surprised to hear, that all the flesh had been picked off the bones of the three unhappy criminals, so that nothing but the skeletons was left. And to such a degree of misery were the inhabitants, not only in Cairo but through all Egypt, reduced, that the carcases of those who died were sold for food at a great price. The khalif at this time is said to have showed the greatest kindness and benevolence towards his unhappy subjects; insomuch that of 10,000 horses, mules, and camels, which he had in his stables when the famine began, he had only three left when it was removed. The famine was followed by a plague; and this by an invasion of the Turks under Abu Ali Al Hassan Haseroddawla, the very general who had been sent against the rebel Azzoddawla and defeated by him. He began with besieging the khalif in his own palace; and the unhappy prince being in no condition to make resistance was obliged to buy himself off at the expense of every thing valuable that was left in his exhausted capital. This, however, did not hinder these merciless plunderers from ravaging all the Lower Egypt from Cairo to Alexandria, and committing the most horrid cruelties through that whole tract. This happened in 1067 and 1068; and in 1069 and 1070 there happened two other revolts in Syria: so that this country was now almost entirely ruined. In 1095 died the khalif Al Mostanser, having reigned sixty years; and was succeeded by his son Abul Kasem, surnamed Al Mostali. The most remarkable transaction of this prince's reign was, his taking the city of Jerusalem from the Turks in 1098: but this success was only of short duration; for it was, the same year, taken by the crusaders. From this time to 1164, the Egyptian history affords little else than an account of the intestine broils and contests between the viziers, who were now become so powerful, that they had in a great measure stripped the khalifs of their civil power, and left them nothing but a shadow of spiritual dignity. These contests at last gave occasion to a revolution, by which the race of Fatemite khalifs was totally extinguished: a revolution which was accomplished in the following manner. One Shawer, having overcome all his competitors, became vizir to Al Aded, the eleventh khalif of Egypt. He had not been long in possession of that office, when Al Dargam, an officer of rank, endeavoured to deprive him of it. Both parties quickly had recourse to arms; and a battle ensued, in which Shawer was defeated, and obliged to fly to Nuroddin prince of Syria, by whom he was graciously received, and who promised to reinstate him in his office of vizier. As an inducement to Nuroddin to assist him more powerfully, Shawer told him that the crusaders had landed in Egypt, and made a considerable progress in the conquest of it. He promised also, that, in case he was reinstated in his office, he would pay Nuroddin annually the third part of the revenues of Egypt; and would, besides, defray the whole expense of the expedition. As Nuroddin bore an implacable hatred to the Christians, he readily undertook an expedition against them, for which he was to be so well paid. He therefore sent an army into Egypt, under the command of Shawer and a general named Asadoddin. Dargam, in the mean time, had cut off so many generals whom he imagined favorable to Shawer's interest, that he thereby weakened the military force of the kingdom, and in a great measure deprived himself of the power of resistance. He was thus easily overthrown by Asadoddin, and Shawer reinstated in the office of vizier. The faithless minister, however, no sooner saw himself firmly established in his office, than he refused to fulfil his engagements to Nuroddin by paying the stipulated sums. Upon this, Asadoddin seized Pelusium and some other cities. Shawer then entered into an alliance with the crusaders, and Asadoddin was besieged by their combined forces in Pelusium. Nuroddin, however, having invaded the Christian dominions in Syria, and taken a strong fortress, called Harem, Shawer and his confederates thought proper to hearken to some terms of accommodation, and Asadoddin was permitted to depart for Syria. In the mean time Nuroddin, having subdued the greatest part of Syria and Mesopotamia, resolved to make Shawer feel the weight of his resentment. He therefore sent back Asadoddin into Egypt with a sufficient force, to compel Shawer to fulfil his engagements: but this the vizier took care to do before the arrival of Asadoddin; and thus, for the present, avoided the danger. It was not long, however, before he gave Nuroddin fresh occasion to send this general against him.

That prince had now driven the crusaders almost entirely out of Syria, but was greatly alarmed at their progress in Egypt; and consequently offended at the alliance which Shawer had concluded with them, and which he persisted in observing. This treaty was also thought to be contrived on purpose to prevent Shawer from being able to fulfil his promise to Nuroddin, of sending him annually a third of the revenues of Egypt. Nuroddin therefore again despatched Asadoddin into Egypt, in 1166, with a sufficient force, and attended by the famous Saladin, his own nephew. They entered the kingdom without opposition, and totally defeated Shawer and the crusaders. They next made themselves masters of Alexandria; and, after that, overran all the Upper Egypt. Saladin was left with a considerable garrison in Alexandria; but Asadoddin was no sooner gone, than the crusaders laid siege to that city. This at last obliged Asadoddin to return to its relief. The great losses he had sustained in this expedition probably occasioned his agreeing to a treaty with Shawer, by which he engaged to retire out of Egypt, upon being paid a sum of money. Asadoddin was no sooner gone, than Shawer entered into a fresh treaty with the Franks. By this new alliance he was to attack Nuroddin in his own dominions, as he was at

that time engaged in quelling some revolters, which would effectually prevent his sending any more forces into Egypt. This treaty so provoked the Syrian prince, that he resolved to suspend his other conquests for some time, and exert his whole strength in the conquest of Egypt. By this time the crusaders had reduced Pelusium, and made a considerable progress in the kingdom, as well as in some other countries, through the divisions which reigned among the Mahommedan princes. In such places as they conquered, they put many to the sword, Christians as well as Mahommedans; selling the rest for slaves, and giving up the towns to be plundered by the soldiers. From Pelusium they marched to Cairo; which was then in no posture of defence, but in the utmost confusion, by reason of the divisions which reigned in it. Shawer, therefore, as soon as he had heard of their approach, caused the ancient quarter called Mesr to be set on fire, and the inhabitants to retire into other parts. He also prevailed upon the khalif to solicit the assistance of Nuroddin; which the latter was indeed much inclined to grant, as it gave him the fairest opportunity both of driving the crusaders out of Egypt, and of seizing the kingdom to himself. For this purpose he had already raised an army of 60,000 horse under his general Asadoddin; and, on the receipt of Al Aded's message, gave them orders to set out immediately. The crusaders were now arrived at Cairo; and had so closely besieged that place, that neither Shawer nor the khalif knew any thing of the approach of the Moslem army, which was hastening to their relief. The vizier, therefore, finding it impossible to hold out long against the enemy, had recourse to his old subterfuge of treaties and high promises. He sent the enemy 100,000 dinars, and promised them 900,000 more, if they would raise the siege; which they, dreading the approach of Asadoddin, very readily accepted. The army of Nuroddin now approached the capital by hasty marches, and were every where received with the greatest demonstrations of joy. Asadoddin, on his arrival at Cairo, was invited by Al Aded to the royal palace, where he, with Saladin and the other principal officers were most magnificently treated. Shawer was no less assiduous in attending punctually upon them. But, having invited the general and some others to an entertainment, he had formed a scheme of having them seized and murdered. The plot, however, being discovered, Shawer's head was cut off, and Asadoddin was made vizier in his stead. He died, however, two months and five days after his instalment, and was succeeded by his nephew Saladin. The new vizier was the youngest of all the grandees who aspired to that office, but had already given some signal proofs of his valor. Some of his rivals were highly displeased with his promotion, and even publicly declared that they would not obey him. To gain these to his interest, therefore, Saladin distributed among them part of the vast treasures left by his uncle; by which means he soon governed Egypt without control. Soon after his being installed into office, he totally defeated the negroes who guarded the royal palace, and had opposed his election; by which means, and by placing a strong garrison in the castle of Cairo, his power became firmly established. But though he had no intention of continuing in his allegiance to Nuroddin, he did not think it prudent at first to declare himself. He sent for his father, however, and the rest of his family, who were in Nuroddin's dominions, in order, as he said, to make them partakers of his grandeur and happiness. Nuroddin did not think proper to deny this request; though being already jealous of the great power of Saladin, he insisted that his family should consider him only as one of his generals in Egypt. A good understanding subsisted between Nuroddin and Saladin for some time, which contributed to raise the credit of the latter with the Egyptians. In 1169 Nuroddin sent him orders to omit the name of Al Aded, the khalif of Egypt, in the public prayers, and substitute that of the khalif of Bagdad in its place. This was a dangerous attempt; as it might have produced a revolt in favor of Al Aded; and at any rate it gave Saladin an opportunity of engrossing even that small remnant of power which was left to the khalif. Al Aded, however, was not sensible of his disgrace: for he was on his death-bed, and past recovery, when Nuroddin's orders were executed. After his death, Saladin seized on all his wealth and valuable effects: which consisted of jewels of prodigious size, sumptuous furniture, a library containing 100,000 volumes, &c. His family he caused to be closely confined in the most retired place of the palace; and either manumitted his slaves, or kept them for himself.

Saladin was now arrived at the highest pitch of wealth, power, and grandeur. He was, however, obliged to behave with great circumspection with regard to Nuroddin; who still continued to treat him as his vassal, and would not suffer him to dispute the least of his commands. He relied for advice chiefly on his father Ayub, who was a consummate politician, and very ambitious of seeing his son raised to the throne of Egypt. He therefore advised Saladin, whilst he amused Nuroddin with feigned submissions, to take every method to secure himself in the possession of so valuable a kingdom. Nuroddin himself, however, was too great a master in dissimulation to be easily imposed on by others; and, therefore, though he pretended to be well pleased with Saladin's conduct, he was all this time raising a powerful army, with which he was fully determined to invade Egypt the following year. But while he meditated this expedition, he was seized with a quinsy at the castle of Damascus, which put an end to his life in 1173. Saladin, though now freed from the apprehensions of such a formidable enemy, did not venture to assume the title of Sovereign, while he saw the successor of Nuroddin at the head of a very powerful army. His first care therefore was to secure to himself an asylum, in case he should be obliged to leave Egypt altogether. For this purpose he chose the kingdom of Nubia; but having despatched his brother Malek Turanshah thither, at the head of a considerable army, the latter was so much struck with the sterility and desolate appearance of the country, that he returned without attempting any thing. Saladin

then sent his brother into Arabia Felix, to subdue that country, which had been for some time held by Abdalnabi, an Arabian prince. Malek entered the country without opposition; and, having brought Abdalnabi to a general action, entirely defeated him, took him prisoner, and threw him into irons. He then overran and reduced under subjection to Saladin great part of the country, taking no fewer than eighty castles of considerable strength. Saladin, now sure of a convenient place of refuge, assumed the title of Sultan of Egypt; and was acknowledged as such by the greater part of the state. The zeal of the Egyptians for the Fatemite khalifs, however, soon produced a rebellion. One Al Kanz, or Kanzanaddowla, governor of a city in Upper Egypt, assembled a great army of blacks, or rather swarthy natives; and, marching into the lower country, was there joined by great numbers of other Egyptians. Against them Saladin despatched his brother Malek, who soon entirely dispersed them. This, however, did not prevent another insurrection under an impostor, who pretended to be David the son of Al Aded, and had collected a body of 100,000 men. But, before these had time to effect any great damage, they were surprisedby the sultan's forces, and entirely defeated. Above 300 were publicly hanged, and a vast number perished in the field, insomuch that it was thought scarcely a fourth part of the whole body escaped. About this time Saladin gained a considerable advantage over the Crusaders, commanded by William II. king of Sicily. That prince had invaded Egypt with a numerous fleet and army, with which he laid close siege to Alexandria by sea and land. Saladin, however, marched to the relief of the city with such expedition, that the crusaders were seized with a sudden panic, and fled with the utmost precipitation, leaving all their military engines, stores, and baggage behind. In 1175 the inhabitants of Damascus begged of Saladin to accept the sovereignty of that city and its dependencies; being jealous of the minister, who had the tuition of the reigning prince, and who governed with an absolute sway. The sultan set out with the utmost celerity to Damascus, at the head of a chosen detachment of 700 horse. Having settled his affairs in that city, he appointed his brother Saif Al Islam governor of it; and set out for Hems, to which he immediately laid siege. Making himself master of this place, he then proceeded to Hamah, which soon surrendered, but the citadel held out for some time. Saladin pretended that he accepted the sovereignty of Damascus and the other places he had conquered, only as deputy to Al Malec Al Saleh, the successor of Nuroddin, and who was then under age; and that he was desirous of sending Azzodin, who commanded in the citadel, with a letter to Aleppo, where the young prince resided. This so pleased Azzodin, that he took the oath of fidelity to Saladin, and immediately set out with his letter. He had not, however, been long at Aleppo before he was, by the minister's orders, thrown into prison; upon which his brother, who had been appointed governor of the citadel of Hamah in his absence, delivered it up to Saladin. The sultan then marched to Aleppo, but, being vigorously repulsed in several attacks, he was at last obliged to abandon the enterprise. At the same time, Kamschlegin, Al Malek's minister or vizier, hired the chief of the Batanists or Assassins, to murder him; but the attempts made in consequence miscarried. See ASSASSINS. After raising the siege of Aleppo, Saladin returned to Hems, which the crusaders had invested. On his approach, however, they retired; after which, the sultan made himself master of its strong castle. This was soon followed by the reduction of Balbec; and these rapid conquests so alarmed the ministers of Al Malek, that, entering into a combination with some of the neighbouring princes, they raised a formidable army, with which they designed to crush the sultan at once. Saladin, fearing the event, offered to cede Hems and Hamah to Al Malek, and to govern Damascus only as his lieutenant: but these terms being rejected, a battle ensued; in which the allied army was utterly defeated, and the shattered remains of it shut up in Aleppo. This produced a treaty, by which Saladin was left master of all Syria, excepting only the city of Aleppo and its territory. In 1176 Saladin returned from the conquest of Syria, and made his triumphal entry into Cairo. Here, having rested himself and his troops for some time, he began to encompass the city with a wall 29,000 cubits in length, but which he did not live to finish. Next year he led a very numerous army into Palestine against the crusaders. But here his usual good fortune failed him. His army was entirely defeated; 40,000 of his men were left dead on the field; and the rest fled with so much precipitation, that, having no towns in the neighbourhood where they could shelter themselves, they traversed the vast desert between Palestine and Egypt, and scarcely stopped till they reached the capital itself. Thus the greatest part of the army perished; and, as no water was to be had in the desert, almost all the cattle died of thirst before the fugitives arrrived on the confines of Egypt. Saladin himself seemed to have been greatly intimidated; for in a letter to his brother Al Malek, he told him, that he was more than once in the most imminent danger; and that God, as he apprehended, had delivered him, to reserve him for the execution of some grand and important design. In 1182 he set out on an expedition to Syria with a formidable army, amidst the acclamations and good wishes of the people. He was, however, repulsed with loss both before Aleppo and Al Mawsel, after having spent much time and labor in besieging these two important places. In the mean time a most powerful fleet of European ships appeared on the Red Sea, which threatened the cities of Mecca and Medina with the utmost danger. The news of this armament no sooner reached Cairo, than Abu Becr, Saladin's brother, who had been left viceroy, caused another to be fitted out with all speed under the command of Lulu, a brave and experienced officer; who quickly came up with them, and a dreadful engagement ensued. The Christians were defeated after an obstinate resistance, and all the prisoners butchered in cold blood. This proved such a terrible blow to the Europeans, that they never more ventured on a like at-

tempt. In 1183 Saladin continued to extend his conquests. The city of Amida in Mesopotamia surrendered to him in eight days; after which, being provoked by some violences committed by Amadoddin, prince of Aleppo, he resolved to make himself master of that place. His army being now numerous, he pushed on the siege with the utmost vigor; upon which Amadoddin capitulated, on condition of being allowed to possess certain cities in Mesopotamia, which had formerly belonged to him, and being ready to attend the sultan on whatever expedition he pleased. After the conquest of Aleppo, Saladin took three other cities, and then marched against the crusaders. Having sent out a party to reconnoitre, they fell in with a considerable detachment of Christians, whom they easily defeated, taking about 100 prisoners, with the loss of only a single man on their side. The sultan, animated by this first instance of success, advanced against the crusaders, who had assembled their whole army at Sepphoris in Galilee. On viewing the sultan's troops, however, and perceiving them to be greatly superior in strength to what they had at first apprehended, they declined an engagement, nor could Saladin with all his skill force them to it. But, though he found it impossible to bring the crusaders to a decisive engagement, he harassed them greatly, and destroyed great numbers of them. He also carried off many prisoners, dismantled three of their strongest cities, laid waste their territories, and concluded the campaign with taking another strong town. For three years Saladin continued to gain ground on the crusaders, yet without any decisive advantage; till 1187, when the cruel ravages committed in their territories obliged the Christians to venture a battle. Both armies, therefore, being resolved to exert their utmost efforts, a most fierce and bloody battle ensued. Night prevented victory from declaring on either side, and the fight was renewed wtih equal obstinacy next day. The victory was still left undecided; but on the third day Saladin's troops, finding themselves surrounded by the enemy on all sides but one, and there also hemmed in by the river Jordan, so that there was no room to fly, fought like men in despair, and at last gained a most complete victory. Vast numbers of the Christians perished on the field. A large body retired to the top of a neighbouring hill covered with wood; but being surrounded by Saladin's troops, who set fire to the wood, they were all obliged to surrender at discretion. Some of them were butchered by their enemies, as soon as they delivered themselves into their hands, and others thrown into irons. Among the latter were the king of Jerusalem himself, Arnold prince of Al Shawbec and Al Carac, the masters of the Templars and Hospitallers, with almost the whole body of the latter. So great was the consternation of the Christians on this occasion, that one of Saladin's men is said to have taken thirty of them prisoners, and tied them together with the cord of his tent, to prevent them from making their escape. The masters of the Templars and Hospitallers, with the knights acting under them, were no sooner brought into Saladin's presence, than he ordered them all to be cut in pieces. After the engagement, Saladin seated himself in a magnificent tent, placing the king of Jerusalem on his right hand, and Arnold prince of Al Shawbec and Al Carac on his left. Then he drank to the former, and at the same time offered him a cup of snow water. This was thankfully received; and the king immediately drank to the prince of Al Carac, who sat near him. 'I will not, said Saladin, suffer this cursed rogue to drink; as that, according to the laudable and generous custom of the Arabs, would secure to him his life.' Then turning towards the prince, he reproached him with having undertaken the expedition while in alliance with himself, with having intercepted an Egyptian caravan in the time of profound peace, and massacring the people of which it was composed, &c. Notwithstanding all this, he told him, he would grant him his life, if he would embrace Mahommedanism. This condition, however, was refused; and the sultan, with one stroke of his scymitar, cut off the prince's head. This terrified the king of Jerusalem; but Saladin assured him he had nothing to fear, and that Arnold had brought on himself a violent death by his want of common honesty. The crusaders being thus totally defeated and dispersed, Saladin next laid siege to Tiberias, which soon capitulated, as did also Acca or Ptolemais, where he found 4000 Mahommedan prisoners in chains, whom he immediately released. As the inhabitants of Acca enjoyed a very extensive trade, he found there not only vast sums of money, but likewise a great variety of valuable wares, all of which he seized. About the same time his brother Al Malec attacked and took a very strong fortress in the neighbourhood; after which Saladin divided his army into three bodies, and soon made himself master of Neapolis, Cæsarea, Sepphoris, and other cities in the neighbourhood of Ptolemais, where his soldiers found only women and children, the men having been all killed or taken prisoners. His next conquest was Joppa, which was taken by storm after a vigorous resistance. Every thing being then settled, and a distribution made of the spoils and captives, Saladin marched in person against Tebrien, a strong fortress in the neighbourhood of Sidon; which he took by assault, after a siege of six days, and ordered the fortress to be razed, and the garrison put to the sword. From Tebrien he proceeded to Sidon, which, being deserted by its prince, surrendered almost on the first summons. Berytus was next invested, and surrendered in seven days. Among the prisoners Saladin found in this place the prince of a territory called Hobeil, who by way of ransom delivered up his dominions to him, and was of consequence released. About the same time, a Christian ship, in which was a nobleman of tried courage and experience in war, arrived at the harbour of Ptolemais, not knowing that it was in the hands of Saladin. The governor might easily have secured the vessel; but neglecting the opportunity, she escaped to Tyre, where the above-mentioned nobleman, together with the prince of Hobeil, contributed not a little to retrieve the affairs of the Christians, and enable

iem to make a stand for four years longer. aladin in the mean time went on with his conuests. Having made himself master of Ascalon, fter a siege of fourteen days, he next invested erusalem. The garrison was numerous, and iade an obstinate defence; but Saladin having t last made a breach in the walls by sapping, ie besieged desired to capitulate. This was t first refused; upon which the Christian amassador boldly said to him:—'If that be ie case, O sultan, know that we who are exemely numerous, and have been restrained om fighting like men in despair, only by the opes of an honorable capitulation, will kill all ur wives and children, commit all our wealth id valuable effects to the flames, massacre 5000 risoners now in our hands, leave not a single east of burden or animal of any kind belonging o us alive, and level with the ground the rock you iteem sacred, together with the temple Al Aksa. fter this we will sally out upon you in a body; id doubt not but we shall either cut to pieces a iuch greater number of you than we are, or irce you to abandon the siege.' This desperate peech had such an effect upon Saladin, that he mmediately called a council of war, at which all ie general officers declared, that it would be iost proper to allow the Christians to depart unolested. The sultan therefore allowed them to iarch out freely with their wives, children, and ll their effects; after which he received ten inars from every man who was capable of payig that sum, five from every woman, and two om every young person under age. For the oor who were not able to pay any thing, the st of the inhabitants raised the sum of 30,000 inars. Most of the inhabitants of Jerusalem ere escorted by a detachment of Saladin's oops to Tyre; and, soon after, he advanced ith his army against that place. As the port as blocked up by a squadron of five men of ar, Saladin imagined that he should easily beome master of it But in this he found himself istaken. For one morning, by break of day, Christian fleet fell upon his squadron, and enrely defeated it; nor did a single vessel escape ieir pursuit. A considerable number of the Iahommedans threw themselves into the sea uring the engagement; most of whom were rowned, though some few escaped. About the ime time Saladin himself was vigorously reulsed by land; so that, after calling a council of ar, it was thought proper to raise the siege. In 188 Saladin reduced the city of Laodicea and ome others, together with many strong castles; ut met also with several repulses. At last he ook the road to Antioch; and having reduced ll the fortresses that lay in his way, many of hich had been deemed impregnable, Bohemond, rince of Antioch, was so much intimidated that e desired a truce for seven or eight months. his Saladin found himself obliged to comply ith, on account of the prodigious fatigues his ien had sustained, and because his auxiliaries ow demanded leave to return home. All these eavy losses of the Christians, however, proved n some respects an advantage, as they were thus bliged to lay aside their animosities, which had riginally proved the ruin of their affairs. Those who had defended Jerusalem, and most of the other fortresses taken by Saladin, having retreated to Tyre, formed there a very numerous body. This proved the means of preserving that city, and also of re-establishing their affairs for the present. For, having received powerful succours from Europe, they were enabled, in 1189, to take the field with 30,000 foot and 2000 horse. Their first attempt was upon Alexandretta; from whence they dislodged a strong party of Mahommedans, and made themselves masters of the place with very little loss. They next laid siege to Ptolemais; of which Saladin had no sooner received intelligence, than he marched to its relief. After several skirmishes with various success, a general engagement ensued, in which Saladin was defeated with the loss of 10,000 men. This enabled the Christians to carry on the siege of Ptolemais with greater vigor; which place, however, they were not able to reduce for two years. This year the sultan was greatly alarmed, by an account that the emperor of Germany was advancing to Constantinople with an army of 260,000 men, to assist the other crusaders. This prodigious armament, however, came to nothing. The multitude were so reduced with sickness, famine, and fatigue, that scarcely 1000 of them reached the camp before Ptolemais. The siege of that city was continued, though with bad success on the part of the Christians. They were repulsed in all their attacks, their engines were burnt with naphtha, and the besieged always received supplies of provisions in spite of the utmost efforts of the besiegers; while a dreadful famine and pestilence raged in the Christian camp, which sometimes carried off 200 people a-day. In 1191 the Christians received powerful succours from Europe. Philip II. of France, and Richard I. of England, arrived before the camp at Ptolemais. The latter was esteemed the bravest and most enterprising of all the generals the crusaders had; and the spirits of his soldiers were greatly elated by the thoughts of acting under such an experienced commander. Soon after his arrival, the English sunk a Mahommedan ship of vast size, having on board 650 soldiers, and a great quantity of arms and provisions, going from Berytus to Ptolemais. Of the soldiers and sailors who navigated this vessel, only one person escaped; who, being taken prisoner by the English, was despatched to the sultan with the news of the disaster. The besieged still defended themselves with the greatest resolution; and, the king of England happening to fall sick, the operations of the besiegers were delayed. On his recovery, however, the attacks were renewed with such fury, that the inhabitants found themselves under a necessity of surrendering the place. One of the terms of the capitulation was, that the crusaders should receive a very considerable sum of money from Saladin, upon delivering up their Mahommedan prisoners. With this article Saladin refused to comply; in consequence of which, Richard caused 3000 of those unfortunate men to be slaughtered at once. After the reduction of Ptolemais, the king of England, now made generalissimo of the crusaders, took the road to Ascalon in order to besiege that place; after which, he intended to

make an attempt upon Jerusalem itself. Saladin, to intercept his passage, placed himself in the way with an army of 300,000 men. On this occasion was fought one of the greatest battles of that age. Saladin was totally defeated, with the loss of 40,000 men; and Ascalon soon fell into the hands of the crusaders. Other sieges were afterwards carried on with success, and Richard even approached within sight of Jerusalem, in 1192, when, by the weakened state of his army, and the divisions among the officers, he was under the necessity of concluding a truce with the sultan, for three years, three months, three weeks, three days, and three hours; soon after which Richard set out on his return to England. In 1193 Saladin died, to the inexpressible grief of the Mahommedans, who held him in the utmost veneration. His dominions in Syria and Palestine were divided among his children and relations into many petty principalities. His son Othman succeeded to the crown of Egypt; but, as none of his successors possessed the enterprising genius of Saladin, the history from that time to 1250 affords nothing remarkable.

In 1250 the reigning sultan, Malek Al Salek, was dethroned and slain by the Mamelukes or Mamlouks, as they are called, a kind of mercenary soldiers who served under him. In consequence of this revolution, the Mamelukes became masters of Egypt, and chose a sultan from among themselves. These Mamelukes were originally young Turks or Tartars, sold to private persons by the merchants, from whom they were bought by the sultan, educated at his expense, and employed to defend the maritime places of the kingdom. The reason of this institution originally was, that the native Egyptians were become so cowardly, treacherous, and effeminate, from a long course of slavery, that they were unfit for arms. The Mamelukes, on the contrary, made most excellent soldiers; for, having no friends but among their own corps, they turned all their thoughts to their own profession. According to M. Volney, they came originally from Mount Caucasus, and were distinguished by the flaxen color of their hair. The expedition of the Tartars, in 1227, proved indirectly the means of introducing them into Egypt. These horrible conquerors, having slaughtered and massacred till they were weary, brought along with them an immense number of slaves of both sexes, with whom they filled all the markets in Asia. The Turks purchased about 12,000 young men, whom they bred up in the profession of arms, in which they soon attained to great perfection; but at last, becoming mutinous, they turned their arms against their masters, and in 1250 deposed and murdered the sultan, Malek. The Mamelukes having thus got possession of the government, and neither understanding nor valuing any thing but the art of war, every species of learning decayed in Egypt, and a great degree of barbarism was introduced. Neither was their empire of long duration, notwithstanding their martial abilities. The reason was, that they were originally only a small part of the sultan of Egypt's standing forces. As a numerous standing army was necessary in a country where the fundamental maxim of government was, that every native must be a slave, they were at a loss how to act; being justly suspicious of all the rest of the army. At last they resolved to buy Christian slaves, and educate them in the same way that they themselves had formerly been. These were commonly brought from Circassia, where the people, though they professed Christianity, made no scruple of selling their children. When they were completed in their military education, these soldiers were disposed of through all the fortresses erected in the country, to bridle the inhabitants; and, because in their language such a fort was called Borge, the new militia obtained the name of Borgites. By this expedient the Mamelukes imagined they would be able to secure themselves in the sovereignty, but they were mistaken. In process of time, the old Mamelukes grew proud, indolent, and lazy: and the Borgites, taking advantage of this, rose upon their masters, deprived them of the government, and transferred it to themselves about A. D. 1382. The Borgites, however, assumed the name of Mamelukes; and became famous for ferocious valor. They were almost perpetually engaged in wars either foreign or domestic; and their dominion lasted till 1517, when they were invaded by Selim I., the Turkish sultan. The Mamelukes defended themselves with incredible valor; notwithstanding which, being overpowered by numbers, they were defeated in every engagement. The same year, their capital, the city of Cairo, was taken, and a terrible slaughter made of those who defended it The sultan, Tuman Bey, was forced to fly; and, having collected all his forces, he ventured a decisive battle. The most romantic efforts of valor, however, were insufficient to cope with the innumerable multitude which composed the Turkish army. Most of his men were cut in pieces, and the unhappy prince himself was at last obliged to take shelter in a marsh. He was dragged from his hiding place, where he had stood up to the shoulders in water, and soon after put to death. With him ended the glory, and almost the existence, of the Mamelukes, who were now every where searched for and cut in pieces.

Selim gave a specimen of his government the very day after his being put in full possession of it by the death of Tuman Bey. Having ordered a theatre to be erected, with a throne upon it, on the banks of the Nile, he caused all the prisoners, upwards of 30,000, to be beheaded in his presence, and their bodies thrown in the river. But notwithstanding this horrid barbarity, he did not attempt the total extermination of the Mamelukes, but seems to have recollected that, if he established a pacha in Egypt with the same powers with which he invested those of other parts, he would be under strong temptations to revolt, by reason of the distance from the capital. He therefore proposed a new form of government, by which the power, being distributed among the different members of the state, should preserve an equilibrium; so that the dependence of the whole should be upon himself. With this view he chose, from among those Mamelukes who had escaped the general massacre, a divan, or council of regency, consisting of the pacha and chiefs of the seven military corps. The former

was to notify to this council the orders of the Porte, to send the tribute to Constantinople, and provide for the safety of government both external and internal; while, on the other hand, the members of the council had a right to reject the orders of the pacha, or even of deposing him, provided they could assign sufficient reasons. All civil and political ordinances must also be ratified by them. Besides this, he formed the whole body into a kind of republic; for which purpose he issued an edict, stating: 'Though, by the help of the Almighty, we have conquered the whole kingdom of Egypt with our invincible armies, nevertheless our benevolence is willing to grant to the twenty-four sangiacs of Egypt (see SANGIAC) a republican government with the following conditions. 1. That our sovereignty shall be acknowledged by the republic; and, in token of their obedience, our lieutenant shall be received as our representative, but to do nothing against our will or the republic; but, on the contrary, shall co-operate with it for its welfare on all occasions: Or, if he shall attempt to infringe any of its privileges, the republic is at full liberty to suspend him from his authority, and to send to our Sublime Porte a complaint against him, &c. 2. In time of war the republic shall provide 12,000 troops at its own expense, to be commanded by a sangiac or sangiacs. 3. The republic shall raise annually and send to our Sublime Porte the sum of 560,000 aslans (see ASLAN), accompanied by a sangiac, who shall have a satisfactory receipt, &c. 4. The same sum to be raised for the use of Medina, and Kiabe, or Mecca. 5. No more troops or janizaries shall be kept by the republic in time of peace than 14,000; but in time of war they may be increased to oppose our and the republic's enemies. 6. The republic shall send annually to our granary, out of the produce of the country 1,000,000 of casiz (twenty-five occa, see OCCA), or measures of corn, viz. 600,000 of wheat, and 400,000 of barley. 7. The republic, fulfilling these articles, shall have a free government over all the inhabitants of Egypt, independent of our lieutenant; and shall execute the laws of the country with the advice of the mollah, or high priest, under our authority, and that of our successors. 8. The republic shall be in possession of the mint as heretofore; but with the condition that it shall be under the inspection of our lieutenant, that the coin may not be adulterated. 9. That the republic shall elect a sheik bellet out of the number of beys, to be confirmed by our lieutenant; and that the said sheik bellet shall be our representative, and shall be esteemed by all our lieutenants, and all our officers, both of high and low rank, as the head of the republic; and if our lieutenant is guilty of oppression, or exceeds the bounds of his authority, the said sheik bellet shall represent the grievances of the republic to our Sublime Porte. But in case any foreign enemy or enemies disturb the peace of the republic, we and our successors engage to protect it with our utmost power, until peace is re-established, without any cost or expense to the republic. Given and signed by our clemency to the republic of Egypt.' Thus the power of the Mamelukes still continued in a very considerable degree, and gradually increased so much as to threaten a total loss of dominion to the Turks. During the last sixty years, the Porte having relaxed from its vigilance, such a revolution took place, that the Turkish power is now almost reduced to nothing. But to understand this we must consider the way in which the race of Mamelukes was continued or multiplied in Egypt. This is not in the ordinary way, by marriage; on the contrary, M. Volney assures us, that 'during 550 years in which there have been Mamelukes in Egypt, not one of them has left subsisting issue; all their children perish in the first or second descent. Almost the same thing holds good with regard to the Turks; and it is observed, that they can only secure the continuance of their families by marrying women who are natives, which the Mamelukes have always disdained. The means by which they are perpetuated and multiplied are the same by which they were first established, viz. by slaves brought from their original country. From the time of the Moguls this commerce has been continued on the banks of the Cuban and Phasis, in the same manner as it is carried on in Africa by the wars among the hostile tribes, and the misery or avarice of the inhabitants, who sell their children to strangers. The slaves thus procured are first brought to Constantinople, and afterwards dispersed through the empire, where they are purchased by the wealthy. When the Turks subdued Egypt (says M. Volney), they should undoubtedly have prohibited this dangerous traffic; their omitting which seems about to dispossess them of their conquest, and which several political errors have long been preparing. For a considerable time the Porte had neglected the affairs of this province: and, in order to restrain the pachas, had suffered the divan to extend its power till the chiefs of the janizaries and azabs were left without control. The soldiers themselves, become citizens by the marriages they had contracted, were no longer the creatures of Constantinople: and a change introduced into their discipline still more increased these disorders. At first the seven military corps had one common treasury; and, though the society was rich, individuals not having any thing at their own disposal, could effect nothing. The chiefs finding their power diminished by this regulation, got it abolished, and obtained permission to possess distinct property, lands, and villages. And as these lands and villages depended on the Mameluke governors, it was necessary to conciliate them, to prevent their oppressions. From that moment the beys acquired an ascendancy over the soldiers, who till then had treated them with disdain: and this continually increased, as their government procured them considerable riches. These they employed in creating friends. They multiplied their slaves; and, after emancipating them, employed all their interest to advance them in the army. These upstarts, retaining for their patrons the same superstitious veneration common in the East, formed factions implicitly devoted to their pleasure.' Thus, about 1746, Ibrahim, one of the kiayas of the

janizaries (see KIAYA), rendered himself in reality master of Egypt; having managed matters so well, that of the twenty-four beys, or sangiacs, eight were of his household. His influence too was augmented by always leaving vacancies, in order to enjoy the emoluments himself, while the officers and soldiers of his corps were attached to his interest; and his power was completed by gaining over Rodoan, the most powerful of all the colonels, to his interest. Thus the pacha became altogether unable to oppose him, and the orders of the sultan were less respected than those of Ibrahim. On his death, in 1757, his family, i. e. his enfranchised slaves, continued to rule in a despotic manner. Waging war, however, among each other, Rodoan and several other chiefs were killed; but, in 1766, Ali Bey, who had been a principal actor in the disturbances, overcame his enemies, and for some time rendered himself absolute master of Egypt. Of this man there are various accounts. The following is given by M. Volney:—It is supposed that Ali was born among the Abazans, a people of Mount Caucasus; from whom, next to the Circassians, the slaves most valued by the Turks are obtained. Having been brought to a public sale at Cairo, Ali was bought by two Jew brothers, named Isaac and Yousef, who made a present of him to Ibrahim. At this time he is supposed to have been about thirteen or fourteen years old, and was employed by his patron in offices similar to those of the pages belonging to European princes. The usual education was also given him, viz. that of learning to manage a horse well; fire a carbine and pistol, and throw the djerid, a kind of dart used in the diversions of that country. He was also taught the exercise of the sabre, and a little reading and writing. In all these feats of activity he discovered such impetuosity, that he obtained the surname of Djendali, or the madman; and, as he grew up, discovered an ambition proportionable to the activity displayed in his youth. About the age of eighteen or twenty Ibrahim gave him his freedom; the badge of which among the Turks is letting the beard grow, for among that people it is thought proper only for women and slaves to want a beard. By his kind patron also he was promoted to the rank of kachef, or governor of a district, and at last elected one of the twenty-four beys. By the death of Ibrahim, in 1757, he had an opportunity of satisfying his ambition; being now engaged in every scheme for the promotion or disgrace of the chiefs, and having had a principal share in the ruin of Rodoan, Rodoan's place was quickly filled by another, who did not long enjoy it; and in 1762 Ali Bey, then styled Sheik el Beled, having got Abdelrahman, the possessor, exiled, procured himself to be elected in his room. However, he soon shared the fate of the rest, being condemned to retire to Gaza. This town, being under the dominion of a Turkish pacha, was by no means a safe retreat; for which reason, Ali having turned off to another place, kept himself concealed for some time, until in 1766 his friends at Cairo procured his recall. On this he appeared suddenly in that city; and killed in one night four of the beys who were inimical to his designs, banished the rest, and assumed the whole power to himself. Still, however, his ambition was not satisfied: and he determined to throw off his dependence on the Porte altogether, and become sultan of Egypt. With this view he expelled the pacha, refused to pay the accustomed tribute, and in 1768 proceeded to coin money in his own name. The Porte, being at that time on the eve of a dangerous war with Russia, had not leisure to attend to the proceedings of Ali Bey; so that the latter had an opportunity of going forward with his enterprises very vigorously. His first expedition was against an Arabian prince named Hammam; against whom he sent his favorite Mohammed Bey, under pretence that the former had concealed a treasure entrusted with him by Ibrahim, and that he afforded protection to rebels. Having destroyed this unfortunate prince, he next began to put in execution a plan proposed to him by a young Venetian merchant, of rendering Gedda, the port of Mecca, an emporium for all the commerce of India; and even imagined he should be able to make the Europeans abandon the passage to the Indies by the Cape of Good Hope. With this view, he fitted out some vessels at Suez: and manning them with Mamelukes, commanded the bey Hassan to sail with them to Gedda, and seize upon it, while a body of cavalry under Mohammed Bey advanced against the town. Both these commissions were executed according to his wish, and Ali became quite intoxicated with his success. Nothing but ideas of conquest now occupied his mind, without considering the immense disproportion between his own force and that of the grand seignior. Circumstances were then indeed very favorable to his schemes. The sheik Daher was in rebellion against the Porte in Syria; and the pacha of Damascus had so exasperated the people by his extortions, that they were ready for a revolt. Having therefore made the necessary preparations, Ali Bey despatched, in 1770, about 500 Mamelukes to take possession of Gaza, and thus secure an entrance into Palestine. Osman the pacha of Damascus, however, no sooner heard of the invasion than he prepared for war, while the troops of Ali Bey held themselves in readiness to fly on the first attack. Sheik Daher hastened to their assistance, while Osman fled without even offering to make the least resistance; thus leaving the enemy masters of all Palestine. About the end of February, 1771, the grand army of Ali Bey arrived: which was supposed to consist of 60,000 men. M. Volney allows that there might be two thirds of that number, who were classed as follows: 5000 Mamelukes, constituting the whole effective part of the army; 15,000 Arabs from Barbary on foot, constituting the whole infantry of the army. Besides these, the servants of the Mamelukes, each of whom had two, would constitute a body of 10,000 men. A number of other servants would constitute a body of about 2000; and the rest of the number would be made up by sutlers and other usual attendants on armies. It was commanded by Mohammed Bey, the friend of Ali. 'But,' says M. Volney, 'as to order and discipline, these must not be mentioned.

The armies of the Turks and Mamelukes are nothing but a confused multitude of horsemen without uniforms, on horses of all colors and sizes, without either keeping their ranks or observing any regular order.' This rabble took the road to Acre, leaving wherever they passed sufficient marks of their rapacity and want of discipline. At Acre a junction was formed with the troops of sheik Daher, consisting of 1500 Safadians, the name of sheik Daher's subjects, from Safad, a village of Galilee, originally under his jurisdiction. These were on horseback, and accompanied by 1200 Motualis cavalry, under the command of sheik Nasif, and about 1000 Mogrebian infantry. Thus they proceeded towards Damascus, while Osman prepared to oppose them by another army equally numerous and ill regulated. 'The Asiatics,' says M. Volney, 'are unacquainted with the elements of war. Their armies are mere mobs, their marches, ravages, their campaigns inroads, and their battles bloody frays. The strongest or most adventurous party goes in quest of the other, which frequently flies without making any resistance. If they stand their ground they engage pell mell, discharge their carbines, break their spears, and hack each other with their sabres; for they have seldom any cannon, and when they have, they are but of little service. A panic frequently diffuses itself without cause; one party flies, the other shouts victory; the vanquished submit to the will of the conqueror, and the campaign often terminates without a battle. Such, in a great measure, were the military operations in Syria in 1771. The combined army of Ali Bey and sheik Daher marched to Damascus. The pachas waited for them; they approached, and, on the 6th of June, a decisive action took place: the Mamelukes and Safadians rushed on the Turks with such fury, that, terrified at their courage, they immediately took flight, and the pachas were not the last in endeavouring to make their escape. The allies became masters of the country, and took possession of the city without opposition, there being neither walls nor soldiers to defend it. The castle alone resisted. Its ruinous fortifications had not a single cannon, much less gunners; but it was surrounded by a muddy ditch, and behind the ruins were posted a few musqueteers; and these alone were sufficient to check this army of cavalry.—As the besieged, however, were already conquered by their fears, they capitulated the third day, and the place was to be surrendered next morning, when, at daybreak, a most extraordinary revolution took place.' This was no less than the defection of Mohammed Bey himself, whom Osman had gained over in a conference during the night. At the moment, therefore, that the signal of surrender was expected, this treacherous general sounded a retreat, and turned towards Egypt with all his cavalry, flying with as great precipitation as if he had been pursued by a superior army. Mohammed continued his march with such celerity, that the report of his arrival in Egypt reached Cairo only six hours before him. Thus Ali Bey found himself at once deprived of all his expectations of conquest; and, what was worse, found a traitor whom he durst not punish at the head of his forces. A sudden reverse of fortune now took place. Several vessels laden with corn for Sheik Daher were taken by a Russian privateer; and Mohammed Bey, whom he designed to have put to death, not only made his escape, but was so well attended, that he could not be attacked. His followers continuing daily to increase in number, Mohammed soon became sufficiently strong to march towards Cairo; and, in April 1772, having defeated the troops of Ali in a rencontre, entered the city sword in hand, while the latter had scarce time to make his escape with 800 Mamelukes. With difficulty he was enabled to get to Syria by the assistance of Sheik Daher, whom he immediately joined with the troops he had with him. The Turks under Osman were at that time besieging Sidon, but raised the siege on the approach of the allied army, consisting of about 7000 cavalry. Though the Turkish army was at least three times their number, the allies did not hesitate to attack them, and gained a complete victory. Their affairs now began to wear a more favorable aspect; but the military operations were retarded by the siege of Yafa, which had revolted, and though defended only by a garden wall, without any ditch, held out for eight months. In the beginning of 1773 it capitulated, and Ali Bey began to think of returning to Cairo. For this purpose Sheik Daher had promised him succours; and the Russians, with whom he had now contracted an alliance, made him a similar promise. Ali, however, ruined every thing by his own impatience. Deceived by an astrologer, who pretended that the auspicious moment when he was highly favored by the stars was just arrived, he set out without waiting for the arrival of his allies. He was also farther deceived by a stratagem of Mohammed, who had by force extorted from the friends of Ali Bey letters pressing his return to Cairo, where the people were weary of his ungrateful slave, and wanted only his presence in order to expel him. Ali Bey accordingly set out with his Mamelukes and 1500 Safadians given him by Daher; but no sooner entered the desert which separates Gaza from Egypt, than he was attacked by a body of 1000 chosen Mamelukes who were lying in wait for his arrival. They were commanded by a young Bey, named Mourad; who, being enamoured of the wife of Ali Bey, had obtained a promise of her from Mohammed, in case he could bring him her husband's head. As soon as Mourad perceived the dust by which the approach of Ali Bey's army was announced, he rushed upon him, attacked and took prisoner Ali Bey himself, after wounding him in the forehead with a sabre. Being conducted to Mohammed Bey, the latter pretended to treat him with extraordinary respect, and ordered a magnificent tent to be erected for him; but in three days he was found dead of his wounds, as was given out; though some affirm, with equal probability, that he was poisoned. After the death of Ali Bey, Mohammed took upon him the supreme dignity; but this change of masters proved of very little service to the Egyptians. At first he pretended to be only the defender of the rights of the sultan, remitted the usual tribute to Constantinople, and took the customary oath

of unlimited obedience; after which he solicited permission to make war upon Sheik Daher, the ally of Ali Bey. The reason of this request was a mere personal pique; and, as soon as it was granted, he made the most diligent preparations for war. Having procured an extraordinary train of artillery, he provided foreign gunners, and gave the command of them to an Englishman, named Robinson. He brought from Suez a cannon sixteen feet long, which had for a considerable time remained useless; and at length, in February 1776, he appeared in Syria with an army equal to that which he had formerly commanded under Ali Bey. Daher's forces, despairing of being able to cope with such a formidable armament, abandoned Gaza, of which Mohammed immediately took possession, and then marched towards Yafa. The history of this siege M. Volney gives as a specimen of the Asiatic manner of conducting operations of the kind. 'Yafa,' says he, 'the ancient Joppa, is situated on a part of the coast, the general level of which is very little above the sea. The city is built on an eminence, in the form of a sugar-loaf, in height about 130 feet perpendicular. The houses, distributed on the declivity, appear rising above each other, like the steps of an amphitheatre. On the summit is a small citadel, which commands the town; the bottom of the hill is surrounded by a wall without a rampart, of twelve or fourteen feet high, and two or three in thickness. The battlements on the top are the only tokens by which it is distinguished from a common garden wall. This wall, which has no ditch, is environed by gardens, where lemons, oranges, and citrons grow in this light soil to a most prodigious size. The city was defended by 500 or 600 Safadians and as many inhabitants, who, at the sight of the enemy, armed themselves with their sabres and musquets; they had likewise a few brass cannon, twenty-four pounders, without carriages; these they mounted as well as they could, on timbers prepared in a hurry: and, supplying the place of experience by hatred and courage, they replied to the summons of the enemy with menaces and cannon shot. Mohammed, finding he must have recourse to force, formed his camp before the town; but was so little acquainted with the business that he advanced within half cannon-shot. The bullets, which showered upon the tents, apprising him of his error, he retreated; and, by making a fresh experiment, was convinced he was still too near. At length he discovered the proper distance, and set up his tent, in which the most extravagant luxury was displayed: around it, without any order, were pitched those of the Mamelukes, while the Barbary Arabs formed huts with the trunks and branches of the orange and lemon trees, and the followers of the army arranged themselves as they could: a few guards were distributed here and there; and, without making a single entrenchment, they called themselves encamped. Batteries were now to be erected, and a spot of rising ground was made choice of to the south-east of the town, where, behind some garden walls, pieces of cannon were pointed, at 200 paces from the town, and the firing began, notwithstanding the musquetry of the enemy, who, from the tops of the terraces, killed several of the gunners. It is evident that a wall only three feet thick, and without a rampart, must soon have a large breach in it; and the question was not how to mount, but how to get through it. The Mamelukes were for doing it on horseback: but they were told that this was impossible; and they consented, for the first time, to march on foot. It must have been a curious sight to see them, with their huge breeches of thick Venetian cloth, embarrassed with their tucked up beniches, their crooked sabres in hand, and pistols hanging to their sides, advancing and tumbling among the ruins of the wall. They imagined that they had conquered every difficulty when this obstacle was surmounted; but the besieged, who formed a better judgment, waited till they arrived at the empty space between the city and the wall; where they assailed them from the terraces and windows of the houses with such a shower of bullets, that the Mamelukes did not so much as think of setting them on fire, but retired under a persuasion that the breach was utterly impracticable, since it was impossible to enter it on horseback. Mourad Bey brought them several times back to the charge, but in vain. Six weeks passed in this manner; and Mohammed was distracted with rage, anxiety, and despair. The besieged, however, whose numbers were diminished by the repeated attacks, became weary of defending alone the cause of Daher. Some persons began to treat with the enemy; and it was proposed to abandon the place, on the Egyptians giving hostages. Conditions were agreed upon, and the treaty might be considered as concluded, when, in the midst of the security occasioned by this belief, some Mamelukes entered the town; numbers of others followed their example, and attempted to plunder. The inhabitants defended themselves, and the attack recommenced: the whole army then rushed into the town, which suffered all the horrors of war; women and children, young and old men, were all cut to pieces, and Mohammed, equally mean and barbarous, caused a pyramid formed of the heads of these unfortunate sufferers to be raised as a monument of his victory.' By this disaster the greatest terror and consternation were every where diffused. Sheik Daher himself fled, and Mohammed soon became master of Acre also. Here he behaved with his usual cruelty, and abandoned the city to be plundered by his soldiers. The French merchants claimed an exemption, and it was procured with the utmost difficulty: nor was even this likely to be of any consequence; for Mohammed, informed that the treasures of Ibrahim, Kiaya of Daher, had been deposited in that place, made an immediate demand of them, threatening every one of the merchants with death if the treasures were not instantly produced. A day was appointed for making the research; but, before this came, the tyrant himself died of a malignant fever after two days illness. His death was no sooner known than the army made a precipitate retreat. Sheik Daher continued his rebellion for some time, but was at last entirely defeated, and his head sent to Constantinople by Hassan Pacha the Turkish high admiral. The death of Mohammed was no

sooner known in Egypt, than Mourad Bey hastened to Cairo in order to dispute the sovereignty with Ibrahim Bey, who had been entrusted with the government on his departure from that place for Syria. Preparations for war were made on both sides; but at last both parties, finding that the contest must be attended with great difficulty, as well as very uncertain in the event, came to an accommodation, by which it was agreed that Ibrahim should retain the title of Sheik El Beled, and the power should be divided between them. But now the beys and others who had been promoted by Ali Bey, perceiving their own importance totally annihilated by this new faction, resolved to shake off the yoke, and therefore united in a league under the title of the House of Ali Bey. They conducted their matters with so much silence and dexterity, that both Mourad and Ibrahim were obliged to abandon Cairo. In a short time, however, they returned and defeated their enemies though three times their number; but, notwithstanding this success, it was not in their power totally to suppress the party. This indeed was owing entirely to their unskilfulness in the art of war, and their operations for some time were very trifling. At last, a new combination having been formed among the beys, five of them were sentenced to banishment in the Delta. They pretended to comply with this order, but took the road of the desert of the Pyramids, through which they were pursued for three days to no purpose. Arriving safe at Miniah, a village situated on the Nile, four leagues above Cairo, they took up their residence, and, being masters of the river, soon reduced Cairo to distress by intercepting its provisions. Thus a new expedition became necessary, and Ibrahim took the command of it upon himself. In October, 1783, he set out with an army of 3000 cavalry; the two armies soon came in sight of each other, but Ibrahim thought proper to terminate the affairs by negociation. This gave such offence to Mourad, who suspected some plot against himself, that he left Cairo. A war betwixt the two rivals was now daily expected, and the armies continued for twenty-five days in sight of each other, only separated by the river. Negociations took place; and the five exiled beys finding themselves abandoned by Mourad, took to flight, but were pursued and brought back to Cairo. Peace seemed now to be re-established; but, the jealousy of the two rivals producing new intrigues, Mourad was once more obliged to quit Cairo in 1784. Forming his camp, however, directly at the gates of the city, he appeared so terrible to Ibrahim, that the latter thought proper in his turn to retire to the desert, where he remained till March 1785. A new treaty then took place; by which the rivals agreed to share the power between them. From that time, we have no accounts of any remarkable transaction in Egypt till the French invaded that country in 1798; and of this, with the events that followed, we shall now take a brief survey.

Among all the powers which the conduct of the French republicans brought against them, Great Britain was the most formidable; the rulers of France, therefore, made her humiliation a leading object in all their designs: and they were most likely to effect this by the destruction of her commerce. The French then looked forward, through Egypt, to the subjugation of the East Indies; and, to execute this daring and desperate undertaking, Buonaparte was appointed commander in chief of the army of the East. In this station he accordingly embarked at Toulon with about 35,000 men, and after stopping at Malta, which he plundered, he pursued his voyage for the coast of Egypt, where he arrived on the 1st of July 1798. The army disembarked the same night, and on the 2nd they reached Alexandria, which was taken by assault on the evening of the 5th From Alexandria the French marched for Cairo, in the course of which they had several skirmishes with the Mamelukes; but arrived on the 20th within six miles of Grand Cairo, which surrendered on the 23d of the same month. On the 25th the French general attacked one of the enemy's posts at Lambabe, in which about 300 of the enemy fell; but this was only a prelude to the battle of the Pyramids, which took place on the 26th, and from the issue of which the French appeared masters of Egypt. Of about 10,000 Mamelukes, 1000 were killed, 1000 drowned, and the rest fled, many of them wounded: 400 camels loaded with baggage, 300 horses richly accoutred, and fifty pieces of artillery, fell into the hands of the conquerors. But though the good fortune of Buonaparte seemed thus far to have followed him in Egypt, he soon experienced a reverse of an irreparable nature. This was no less than the destruction of his fleet: an event so disastrous to him, he appeared to have no suspicion of, and its effects, heightened by the disappointment he met with at Acre, were displayed in his future desperate conduct. After the surrender of Cairo, Buonaparte formed his army into three divisions, one of which, under Desaix, he destined for Upper Egypt, to pursue the flying Mamelukes; another he appointed for the defence of Cairo, while he marched himself, at the head of the third, in pursuit of Ibrahim Bey, who had taken his route towards Syria with a valuable caravan. In order, however, to oppose and prevent the execution of Buonaparte's designs in Egypt, the British government entered into an alliance with the Porte, and a plan was concerted betwixt them, the chief preparations for the accomplishment of which were made in Syria, under the superintendence of the pacha Djezzar. An army from Asia Minor was to make an attack upon the frontiers of Egypt towards Syria, while its operations were to be favored by making a powerful diversion towards the mouths of the Nile, as well as by different assaults to be made in Upper Egypt, with the remains of Mourad Bey's army. Sir Sidney Smith sailed from Portsmouth to direct the execution of this extensive plan, and to co-operate, as much as possible, towards its success, with the maritime force under his command. Care was taken, in the mean time, to block up the harbour of Alexandria with four ships of the line and five frigates, under the command of commodore Hood, who, without the assistance of a land force sufficient to attack Alexandria, found it impracticable to burn or destroy the French fleet

of transports. The report that the French vessels in the old port were burnt, he also found to be groundless; and he had made no use of the light vessels sent him by the combined fleet of Turks and Russians. Buonaparte, understanding what was going on, quickly formed the design of leaving Egypt, and of marching into Syria, for the purpose of destroying the preparations of the pacha Djezzar, and of disconcerting the plans of Sir Sidney Smith; but the result of this enterprise proved the reverse of the hero's expectations. Jaffa, the ancient Joppa, did not surrender till it had made an obstinate defence, and even then it was only to the superiority of European tactics. From Jaffa the hitherto triumphant general marched his army, in three divisions, against St. Jean d'Acre; but here he was obliged to stop, for the pacha, encouraged and supported by Sir Sidney Smith, baffled all his attempts upon the place, during a siege of about two months; and, after the loss of nearly the half of his army, he was forced to return to Egypt. Perhaps, however, the ultimate cause of Buonaparte's mortification at Acre, was the interception of his heavy artillery by the British, on their way from Damietta and Rosetta. The French troops reached Grand Cairo in twenty-six days after raising the seige of Acre; yet, in the course of this rapid march, they ravaged the whole country, burnt the harvests, destroyed the defences of the different ports, the magazines, and every thing that could be of avail to the Turks in approaching the frontiers of Egypt. In the mean time Sir Sidney Smith, with the greatest promptitude, had continued the execution of the remaining parts of the plan of operations against the French in Egypt, in which he was seconded by the increasing zeal of the Turks. Seid Mustapha Pacha had assembled, at the different ports in the island of Rhodes, the troops which were to attack Alexandria, under the conduct of European officers; and the combined fleet of Turkey and Britain were to sail for Egypt as soon as a convoy, to be sent by the captain pacha, then lying at anchor in the Dardanelles, should arrive at Rhodes. Buonaparte, on his part, was no less active: after subduing, in a great measure, a spirit of rebellion which had been industriously raised in the minds of the inhabitants in his absence, he turned his attention to the re-organisation of his army, which had suffered severely in the expedition to Syria; and so assiduous was he in this matter, that his troops were fit for action in about three weeks. But when in the neighbourhood of the Pyramids, intending to pursue Mourad Bey in his retreat to Fayoum, intelligence was brought him from Alexandria, that a Turkish fleet of 100 ships had anchored in the bay of Aboukir, from which 3000 troops had landed, and taken the fort of Aboukir by assault, and massacred the garrison of 500 men. He accordingly directed his officers to lead their forces towards the place of landing, and appointed the first rendezvous of the army to be at Ramanieh, on the left bank of the Nile. General Murat, with the advanced guard under him, took the route to Gizeh, and the moveable column under general Menou, together with the park of artillery and the staff, formed a junction at Ramanieh on the 20th of July The army afterwards assembled at the wells between Aboukir and Alexandria, at the latter of which places Buonaparte fixed his head quarters. The Turkish army was about 18,000 strong, but divided into two parts, and encamped on the opposite sides of a beautiful plain. When the French general came in sight of it, he immediately formed his columns for attack. General d'Estaing, with a body of infantry, carried the entrenched height of the enemy, which supported their right, at the point of the bayonet, while general Murat, with a body of cavalry, advancing rapidly into the centre of the Turkish army, prevented the junction of its different parts, and cut off their retreat; and, by these manœuvres, 2000 men were partly consigned to a watery grave, and partly killed by the republicans. The left division was next attacked, which made a more obstinate stand; but, by a variety of skilful movements, the whole were at last, though with considerable loss to the French, thrown into confusion, and obliged to fly; and the greatest part, thinking to reach their ships, perished in the sea. The fort of Aboukir was next summoned to surrender, but the Turks, having no idea of capitulating with arms in their hands, defended it with desperate fury; and, though general Menou besieged it in form, they did not yield till he had bombarded it for eight days, and reduced it almost to a heap of ruins. At last the pacha's son and 2000 men laid down their arms, and were made prisoners of war; and, in the fort, the French found 1800 men killed, and 300 wounded. This woeful reverse of fortune on the part of the Turks was beheld, it is said, by Sir Sidney Smith, while he had it not in his power to contribute in any manner, as at Acre, towards preventing it. After the surrender of the fort of Aboukir, Buonaparte returned to Alexandria, where he received intelligence of the dismal situation of French affairs in Europe, particularly in Italy and on the Rhine, and the convulsed state of the interior of France; upon which he resolved to leave Egypt and return home, doubtless full of the idea of attaining to that sovereignty which he afterwards reached. Admiral Gantheaume was ordered to fit out two frigates with the utmost expedition, but was not informed of their destination. His future designs were known only to general Berthier, whom alone he made his confidential friend; though he brought with him generals Lasnes, Marmont, Murat, and Andreossi; as also Monge and Berthollet of the institute. Bessiers and his guides received sealed notes, not to be opened till a certain day and hour, and at a particular point of the sea shore; which were found to contain orders for immediate embarkation. Another packet, to be opened on the day after the sailing of the frigates, nominated general Kleber to the chief command, and Desaix to that of Upper Egypt. From general Kleber's despatches, after the departure of Buonaparte, it appears that Mourad Bey, having passed down the Nile to El-Ganayur, was repulsed by a division of the army of Upper Egypt, commanded by general Morand. Having overtaken him in his flight, they surprised his camp at Samahout, killed a vast number of the Mamelukes, took 200 camels with spoils, 100 horses, and an immense

quantity of military implements: Mourad himself escaping with difficulty, and being obliged to wander through the inhospitable deserts of Upper Egypt in quest of an asylum, and the necessaries of life. This man having been a steady and formidable opponent to the French, Desaix determined, if possible, to cut him off, and, for this purpose, he quickly organised two columns of infantry, mounted on dromedaries, taking the command of one himself, and giving the other to adjutant-general Boyer, who came up with Mourad in the desert of Sediman on the 19th of October, after a forced march of three days. Here a desperate conflict ensued, in which the Mamelukes seemed determined to get possession of the dromedaries, but the republicans soon put them to flight and pursued them back to the deserts. A Turkish fleet of eighteen sail had come to anchor before Damietta on the 24th September, which, by the end of October, was increased to fifty-three sail, with Sir Sidney Smith on board the Tyger as naval commander. From this fleet, on the 1st November, about 4000 Turks were landed, who were quickly attacked by general Verdier at the head of 1000 men; and however unequal the contest would seem, the Turks, it is said, lost no fewer than 3000 men killed, 800 prisoners, including Ismael Bey the second in command, thirty-two stand of colors, and five pieces of cannon. This was succeeded by a number of battles of less note, in which the success of the French was various; and they appeared willing to evacuate Egypt upon certain conditions, which were signed at El-Arish by general Kleber and Sir Sidney Smith. These, however, were afterwards rejected, through a species of policy not easily accounted for, and fresh obstacles started against the evacuation proposed; which, in the opinion of some, was an object much to be desired by the remains of the army of the east, while the republicans refused that there was any occasion for such a measure, holding out that they had still 20,000 effective men in that quarter of the globe, sharing liberally in the affections of the inhabitants. Hostilities were accordingly renewed, and the gallant general Kleber, though now in unfavorable circumstances, after defeating the Turks with far inferior numbers, took Cairo by storm, and formed an alliance with Mourad Bey; but was afterwards treacherously assassinated by a janissary, while presenting the commander with a memorial for his perusal. Upon this, after some other generals, particularly Reynier, had declined the chief command, it was accepted of by Menou; which, as a variance had subsisted between him and Kleber, raised suspicions that he had hired the assassin; but the dying assertions of the murderer, who was impaled alive, his right hand burnt off, and his body left to be devoured by birds of prey, demonstrated these to be groundless. Three sheiks who were in the secret of the assassin's designs, but revealed nothing of the matter, were beheaded. Sir Sidney Smith sent lieutenant Wright to Cairo with proposals to general Menou respecting the evacuation of Egypt; and the general's answer was anxiously expected by the combined powers, as the grand vizier was resolved to march against the enemy with 30,000 men, if he did not listen to the proposals. They were soon given to understand that he would hearken to no overtures of accommodation which they could make; for he had resolved to advance against Syria with the principal part of his army. This was an enterprise in which Buonaparte had failed, when opposed by Sir Sidney Smith: but Menou had lately been joined by a number of the Beys, with a view o. securing their independence, having been alarmed with the idea that the sublime Porte was determined to subdue Egypt and destroy the Mamelukes: among others, the junction of Mourad Bey was of considerable importance to Menou, on this occasion. Alexandria, Damietta, and Rosetta, were strongly fortified by Menou, who also finished the lines begun by colonel Bromley at Aboukir, making several important additions; every place was put in such a state of defence, as appeared to defy any attack from the Turks. Great Britain, in the mean time, had determined on compelling the French troops to evacuate Egypt, that all apprehensions might be quieted respecting the East Indies from that quarter; and, with this view, an army was organised for the invasion of Egypt, the command of which was given to one of the most eminent and worthy officers of the brilliant age in which he lived, general Sir Ralph Abercromby. The ships with the troops anchored in the bay of Aboukir on the 2nd of March, but on account of the unfavorableness of the weather they did not begin to disembark till the morning of the 8th. In order to oppose the landing of the British forces, about 4000 of the French had marched from Alexandria, and taken their station on the heights of Aboukir; thus an action soon took place between the hostile armies, but after about two hours fighting the republicans retreated, and they were pursued to the walls of Alexandria. Passing over the skirmishing occurrences of the few following days, an action of the utmost moment took place on the 21st of March, when the French advanced with their whole force, amounting to 11,000 men, and attacked the British, about four miles from Alexandria, two hours before day-break. They commenced by a false attack on the left of the British army, but were still more desirous to have turned the right of their opponents, which they attempted in vain. Nor were they more successful in their attack upon the central division. The conflict, however, was obstinate and bloody; and though the French were completely defeated, with the loss of 3000 men killed and wounded (among whom were three generals; Roize, who was left dead on the field, and Lanusse and Rodet, who both died of their wounds soon after), this was not effected without considerable loss on the part of the British, who had soon to lament the death of their illustrious commander. The brave general Abercromby 'was mortally wounded early in the action, but continued delivering his orders with that coolness and perspicuity which ever distinguished him. His situation was not known till after the battle, when, having fainted with loss of blood, he was carried on board lord Keith's ship, where he died eight days after the

engagement, in which, like Epaminondas, and like Wolfe, he lost his life, after having led on his soldiers to a glorious victory.' Had it not been for the inferiority of the British cavalry (the wretched horses they were obliged to purchase at Marmorice Bay) to that of the enemy, whose retreat was also covered with cannon on the top of the hills, British valor would have this day completed the purpose for which it was displayed in this quarter. But general (since lord) Hutchinson, succeeding the gallant Abercromby as commander in chief of the British forces, was now to direct them to the expulsion or the excision of the French. The town and castle of Rosetta were taken by a division of the British army under colonel Spencer, aided by a body of the Turks; and early in May a strong detachment was sent against Cairo. On the 19th of the same month the French were attacked near Ramanieh, by a body of the Turks assisted by the British when they were repulsed, and obliged to retire towards Cairo; and about the middle of June the city of Cairo was invested on all sides by the united forces of the British and the grand vizier. On the 22nd of June the garrison of Cairo sent a flag of truce to the British general, and, after a negociation of several days, a convention was agreed to, by which the French troops at Cairo and its dependencies were to be conveyed in ships of the allied powers, and at their expense, together with their baggage, arms, ammunition, and effects, to the nearest French ports in the Mediterranean. Alexandria held out some time longer, and Menou had resolved on defending it to the last, but he was soon obliged to surrender, upon the conditions of the convention of Cairo, for himself and the army under his command; and thus the whole of Egypt was left in the possession of the allies. After the evacuation of Egypt, by the French, the English endeavoured to effect a reconciliation between the Mamelukes and the Turks, to restore the former government of the country: but the Turks treacherously assassinating a number of the beys, the remainder fled into Upper Egypt, and the Porte, being unable to subdue them, concluded a treaty with them, allowing them the possession of that part of the country. In consequence, however, of mutinies and intestine contentions among the Turkish troops, the Mamelukes soon returned into Lower Egypt, making the country a scene of anarchy and confusion, alternately ravaged by the contending parties. A small body of British troops, under the command of general Fraser, again landed on the coast of Egypt, on the 17th of March 1807, to whom the town and fortress of Alexandria surrendered on the 21st of the same month, though they were afterwards unfortunate; but as this enterprise took place in consequence of a rupture betwixt Britain and the Ottoman Porte, through the ascendancy of the French ambassador in the Turkish councils, it will fall more properly to be noticed under the article TURKEY.

At this period Mohammed Aly, the present pacha of Egypt, had recently been invested with that authority. He is a singular despot who, beginning his career in blood (for in the year 1811 he invited the Mamelukes to Cairo, and butchered them all in the citadel) has materially improved the resources of this fine country, and seems to be rapidly assimilating it to its ancient fruitfulness and prosperity. Cairo was sacked at this time by his troops, and every Mameluke in the provinces was put to death. It is said, in extenuation of this massacre, that he had received orders from Constantinople to exterminate this corps, who had at all times been troublesome, and who might take advantage of the absence of the pacha's army, a great part of which was required in Arabia for the subjugation of the Wahabees. He knew, too, that the beys were in correspondence with his enemies. Mohammed, however, could not but be gratified at the reception of such an order, the execution of which would rid him of doubtful friends and powerful enemies; and so little compunction did he feel on the occasion, that, we are told by M. Mengin, on being informed that he was reproached by all travellers in their narratives, for this treacherous and inhuman massacre, he replied that he would have a picture of it painted, together with one of the death of the duc d'Enghien, and leave posterity to judge which was the more barbarous.

Mohammed now turned his attention to the state of the war carrying on in Arabia against the Wahabees. His son, whom he left in command, had taken from them the city of Medina, the keys of which the pacha sent the Porte, with large presents of coffee, money, and jewels. He now also thought it time to pay his devotions at the shrine of Mecca. At Jeddah he was received with all kindness and hospitality by the shereef Ghaleb; in return for which, either through avarice, as some think, or, as others say, on discovery that the shereef was acting a double part, he secretly ordered his son Toussoun to seize and convey him to Cairo; while he plundered his palace of immense treasures, a part of which he applied to the support of the army, and, as usual, shared a part with his master, the Porte.

The pacha then entered upon one of his favorite projects, that of training his troops after the European system. This occasioned, in the first instance, a general conspiracy of the agas and chiefs against his authority, and the conspirators broke at once into the city, plundering the bazaars and spreading universal terror: the pacha with some difficulty quelled this revolt, and, remunerating the inhabitants of Cairo, suspended the execution of his scheme. His son, Ibrahim Pacha, having succeeded in completely subduing the Wahabees, to signalise the event he assembled the whole of the pilgrims from Egypt and Syria on Mount Arafat, where with great solemnity, and in conformity with a vow which he had made in case of success, he sacrificed 3000 sheep, and largely distributed alms in Mecca; he then departed for Cairo, and on his arrival received the honors of a triumph. On this occasion Mohammed also received rich presents from the grand signior, and compliments on his splendid victories.

The viceroy was now at liberty to turn his attention to the south, and to bring the whole

country on each side of the Nile, as far as Sennaar, under his subjection, and for this purpose he sent an army, under his youngest son Ismael. Of the activity and rapid progress of this young officer, his humanity and traits of generosity towards his prisoners and the conquered inhabitants, several instances are recorded. One single act of severity, however, proved fatal to him. He had ordered, when at Sennaar, one of the chiefs of that country to be bastinadoed, who seized the first favorable occasion to avenge himself. Ismael had gone to a village at some little distance from Sennaar, with a small guard of forty men; the chief, with a party, followed him thither, and, surprising his lodgings by night, stabbed him to the heart with a poniard, and most of his guards fell in the scuffle.

One of the objects of this expedition was that of recruiting his army with the blacks of Sennaar, Shendy, Kordofan, and the neighbouring countries, which was accomplished to the number of from 16,000 to 18,000 men. These unhappy beings were all of them, in the first place, vaccinated, and were then instructed in manual exercise and military evolutions, in the European mode, by some French officers. The hopes of the pacha, however, were greatly disappointed in these black troops. They were strong able-bodied men, and not averse from being taught; but when attacked by disease, which soon broke out in the camp, they died like sheep infected with the rot; such was the dreadful mortality that ensued, that, out of 18,000 of these unfortunate men, 3000 did not remain alive at the end of two years.

He now had recourse to a regular conscription of the Arabs or Fellahs, of whom he seized about 30,000 indiscrimately, and had them conveyed to Upper Egypt under a military guard. These, with the remains of the black slaves, a few Berbers, and the Mameluke officers, compose the pacha's present army. Twelve Europeans, chiefly Italians, were employed as instructors; at their head is placed colonel Léve, formerly aid-de-camp to Marshall Ney. A new conscription took place in 1814, of 15,000 more, it being the intention of Mohammed Aly to keep up an army of 40,000 men, one battalion of which is to be stationed at Alexandria, to be trained as marines for his navy, which is to consist of forty vessels of different rates, the seamen being entirely Arabs. His adoption of European tactics has been thought by some travellers to be preparatory to throwing off his allegiance to the Porte, to whom it is supposed he has given irreparable offence by his former protection of the Greeks: he has lately, however, made the amende honorable, we presume, by his expedition against the Greeks; and his presents to the Porte have been splendid and constant.

We again advert to the statistical and other peculiarities of this interesting country, with a view to furnishing the reader with the latest information of travellers on these points.

The river Nile, when swelled by the rains which fall in Abyssinia, begins to rise in Egypt about the month of May; but the increase is inconsiderable till towards the end of June, when it is proclaimed by a public crier through the streets of Cairo. About this time it has usually risen five or six cubits; and, when it has risen to sixteen, great rejoicings are made, and people cry out Waffah Allah, i. e. God has given abundance. This commonly takes place about the end of July, or before the 20th of August; and the sooner it takes place, so much the greater are the hopes of a good crop. Sometimes, though rarely, the necessary increase does not take place till later. In 1705 it did not swell to sixteen cubits till the 19th of September, the consequence of which was, that the country was depopulated by famine and pestilence. We may easily imagine, that the Nile cannot overflow the whole country of itself, in such a manner as to render it fertile. There are, therefore, innumerable canals cut from it across the country, by which the water is conveyed to distant places, and almost every town and village has one of these canals. In those parts of the country which the inundation does not reach, and where more water is required than it can furnish, as for watering of gardens, &c., they have recourse to artificial means for raising it from the river. Formerly they made use of Archimedes's screw, but now, in place of it, they have the Persian wheel. This is a large wheel turned by oxen, having a rope hung with several buckets which fill as it goes round, and empty into a cistern at the top. Where the banks of the river are high, they frequently make a basin in the side of them, near which they fix an upright pole, and another with an axle across the top of that, at one end of which they hang a great stone, and at the other a leathern bucket; this bucket, being drawn down into the river by two men, is raised by the descent of the stone, and emptied into a cistern placed at a proper height. This kind of machine is used chiefly in the upper parts of the country, where the raising of water is more difficult than in places near the sea. When any of their gardens or plantations want water, it is conveyed from the cisterns into little trenches, and from thence conducted all round the beds in various rills, which the gardener easily stops by raising the mould against them with his foot, and diverts the current another way as he sees occasion. The rise of the inundation is measured by an instrument adapted for the purpose, called mikeas, which we translate nilometer. It is a round tower near Cairo, with an apartment, in the middle of which is a cistern neatly lined with marble. The bottom of this cistern reaches to that of the river, and there is a large opening, by which the water has free access to the inside. The rise of the water is indicated by an octagonal column of blue and white marble, on which are marked twenty cubits of twenty-two inches each. The two lowermost have no subdivisions, but each of the rest is divided into twenty-four parts, called digits; the whole height of the pillar being thirty-six feet eight inches. When the river has attained its proper height, all the canals are opened, and the whole country laid under water. During the time of the inundation a certain vertical motion of the waters takes place; but, notwithstanding this, the Nile is so easily managed, that many fields

lower than the surface of its waters are preserved from injury merely by a dam of moistened earth, not more than eight or ten inches in thickness. This method is used particularly in the Delta when it is threatened with a flood. As the Nile does not always rise to a height sufficient for the purposes of agriculture, the former sovereigns of Egypt were at vast pains to cut proper canals to supply the deficiency. Those which convey the water to Cairo, into the province of Fayoom, and to Alexandria, have always been best taken care of by the government.

The lands inundated by the Nile, as we have observed, are exceedingly fertile; and though they have successively from year to year, without intermission, borne one and frequently two crops, and without any rational system of invigoration by manure or otherwise, for more than 3000 years, they still continue to do the same without any perceptible impoverishment, and without any further tillage than the adventitious top-dressing of black slimy mould, by the overflowing of the river. But the productiveness of the soil, where the inundation does not reach, has been greatly over-rated. The crops of wheat in particular are scanty, not above five or six for one; but for maize and dourra, or millet, the soil appears to be peculiarly adapted; and these two species of grain, with rice, lentils, and various kinds of pulse, constituting the principal food of nine-tenths of the inhabitants, allowed the government, who usurped the monopoly, to export the greater part of the wheat produced. Since the peace of Europe, however, this branch of commerce has nearly ceased, in consequence of the increased cultivation of that grain in other countries. At one period not less than 800 or 900 European vessels annually sailed from Alexandria, for Marseilles, Genoa, Leghorn, Trieste, Malta, and Constantinople, freighted with articles of raw produce in exchange for hard money or for the manufactures of those respective countries; while two or three cargoes were all that could be got together for England. But, in the year 1821, an experiment was made by an English merchant, of a cargo of linseed for crushing; when it was found that, notwithstanding the freight (on account of the greater distance) doubled that which is paid from Russia, it would answer as a return for British exports, if relieved from the heavy quarantine duty, to which Baltic seed is not subject; this duty was accordingly mitigated by the lords of the treasury, and, in consequence, the exportation direct from Egypt to England increased last year to 25,000 quarters, and gave employment to more than twenty British ships. An article of the very first importance to the commerce and manufactures of England has recently been raised in Egypt, and to such an extent as to have surpassed all expectation. We allude to cotton wool, not of the usual coarse kind hitherto grown in Egypt, but of a very superior quality, raised from Brasil seed. The first essay was made by order of the pacha, in the year 1822, when the crop yielded about 25,000 bags, of two cwt. each. A few bags of this cotton, sent to Liverpool on trial, were sold at the rate of from 11*d.* to 13*d.* per pound. Some thousand bales have, in the interval, been sent to France, Italy, and the South of Germany. In 1823 the crop was so abundant that, after supplying the demands of the countries bordering on the Mediterranean, it is calculated that at least 50,000 bags may be exported to England in the course of the present year; and the pacha is still extending the culture of this useful plant, on tracts of country long neglected, by clearing out the ancient canals and digging others, which communicate with the Nile; so that the crop of 1824 was expected to double that of the preceding, and in future years will, in all probability, equal the whole of what is now imported from America, to which it is by no means inferior. This new source of supply acquires additional importance from the consideration, that it will be brought to England in British shipping, and will lead to a material increase of our export trade to Egypt.

Mohammed has recently engaged himself in opening the ancient canals and digging new ones. Among these the canal of Mahmoudiah is particularly deserving of notice, and connects the harbour of Alexandria with the Nile, at Fouah; by which the whole produce of Egypt can be brought without danger or interruption to the port of shipment. In the winter of 1817, when a scarcity of grain prevailed all over Europe, ships flocked to Egypt where there was abundance; but owing to the bar at the mouth of the Nile, near Rosetta, and the tempestuous weather along the coast, none of it could be conveyed in time to the vessels that were waiting at Alexandria, to the number of 300 sail, some of which ultimately departed with half cargoes, and others went away in ballast; thus the losses became incalculable, and the disputes endless. It was now that the advantages of a navigable canal were seen by the pacha, who accordingly set about the stupendous undertaking. All the laboring classes of Lower Egypt were put in requisition, and a month's pay advanced them to provide biscuit and provisions. To each village and district was marked out the work allotted to it. The Arabs were marched down in thousands and tens of thousands, under their respective chiefs, along the line of the intended canal; and, however exaggerated it may appear, we have the best authority for stating that the number employed at one time exceeded 250,000 men. In about six weeks the whole excavation was completed, and the people returned home to their respective occupations; but in the autumn a few thousands were called upon to face parts with masonry, and make the whole navigable for vessels of considerable burden. This work is about forty-eight miles in length, ninety feet in breadth, and from fifteen to eighteen feet in depth. It was opened with great pomp on the 7th of December 1819.

Until lately the arts and all kinds of learning were at a very low ebb among the Egyptians. Even the most simple of the mechanical professions are still in a state of infancy. The work of their cabinet-makers, gunsmiths, and locksmiths, is clumsy; and their manufactures of gunpowder and sugar, though much improved are

till indifferent. The only thing in which they an be said to have arrived at any degree of erfection, is the manufacture of silk stuffs; hough even these are far less highly finished han those of Europe, and likewise bear a much igher price. One extraordinary art indeed is till extant among the Egyptians, and appears to ave existed in that country from the most re-note antiquity; a power of enchanting the most eadly serpents in such a manner, that they allow hemselves to be handled, nay even hurt and vounded severely, without offering to bite the erson who injures them. Those who have this rt are named PSYLLI. See that article. But the pacha has introduced colleges and cademies for the instruction of youth in foreign anguages and mathematics; afforded toleration o all the European and other religious sects; nd encouraged the practice of vaccination and he surgery and pharmacy of Europe.

Mr. Bruce gives a long account of the sources f the vast quantities of marble, met with in the emains of ancient buildings in this country; nd which supplied in ancient times, we know, he materials of many of the public buildings f Italy. These he discovered during his jour-ey from Kenne to Cosseir on the Red Sea, efore he went to Abyssinia. At Hamra the 'orphyry Mountains and quarries begin, the tone of which is at first soft and brittle; but he quantity is immense, as a whole day was aken up in passing by them. These Porphyry Mountains begin in the latitude of nearly 24°, nd continue along the coast of the Red Sea to bout 22° 30′, when they are succeeded by the narble mountains; these again by others of labaster, and these last by basaltic mountains. 'rom the marble mountains our author selected welve kinds, of different colors, which he rought along with him. Some of the moun-ains appeared to be composed entirely of red nd others of green marble, and by their dif-erent colors afforded an extraordinary spectacle. Not far from the Porphyry Mountains the cold vas so great, that his camels died on his return rom Abyssinia, though the thermometer stood o lower than 42°. Near Cosseir he discovered he quarries whence the ancients obtained those mmense quantities of marble, with which they onstructed so many wonderful works. The irst place, where the marks of their operations vere very perceptible, was a mountain much igher than any they had yet passed, and where he stone was so hard that it did not yield to the troke of a hammer. In this quarry he ob-erved that some channels for conveying water erminated; which, according to him, shows that vater was one of the means by which these hard tones were cut. In four days, during which ur author travelled among these mountains, he ays, that he had 'passed more granite, porphyry, narble, and jasper, than would build Rome, Athens, Corinth, Syracuse, Memphis, Alexan-lria, and half a dozen such cities.' It appeared o him that the passages between the mountains nd what he calls defiles, were not natural but rtificial openings; where even whole moun-ains had been cut out, in order to preserve a entle slope towards the river. This descent Mr. Bruce supposes not to be above one foot in fifty; so that the carriages must have gone very easily, and rather required something to retard their velocity than any force to pull them forward. Concerning the mountains in general, he observes, that the porphyry is very beau-tiful to the eye, and is discovered by a fine purple sand without any gloss. An unva-riegated marble of a green color is generally met with in the same mountain; and where the two meet, the marble becomes soft for a few inches, but the porphyry retains its hardness. The granite has a dirty brown appearance, being covered with a sand; but, on removing this, it appears of a gray color with black spots, with a reddish cast all over it. The granite mountains lie nearer to the Red Sea, and seem to have afforded the materials for Pompey's pillar. The redness above mentioned seems to go off on ex-posure to the air; but re-appears on working or polishing the stone farther. The red marble is next to the granite, though not met with in the same mountain. There is also a red kind with white veins, and vast quantities of the common green serpentine. Some samples of that beautiful marble named Isabella, were likewise observed; one of them of that yellowish cast called quaker color, the other of the bluish kind named dove color. The most valuable kind is that named verde antico, which is found next to the Nile in the mountains of serpentine. It is covered by a kind of blue fleaky stone, somewhat lighter than a slate, more beautiful than most kinds of mar-ble, and when polished having the appearance of a volcanic lava. In these quarries the verde antico had been uncovered in patches of about twenty feet square. There were small pieces of African marble scattered about in several places, but no rocks or mountains of it; so that our author conjectures it to lie in the heart of some other kind. The whole is situated on a ridge with a descent to the east and west, by which means it might easily be conveyed either to the Nile or Red Sea; while the hard gravel and level ground would readily allow the heaviest carriages to be moved with very little force. In the Red Sea in lat. 25° 3′, at a small distance from the south-west coast, there is an island called the Mountain of Emeralds; but none of these pre-cious stones are to be met with there. Here, as well as on the continent, there were found many pieces of a green pellucid substance; but veined, and much softer than rock crystal, though somewhat harder than glass. A few yards up the mountain he found three pits, which are supposed to have been the mines whence the ancients obtained the emeralds; but, though many pieces of the green substance above mentioned were met with about these pits, no signs of the true emerald could be perceived. The sub-stance, however, he conjectures to have been the smaragdus of the Romans. In the mountains of Cosseir, as well as in some places of the deserts of Nubia, our author found some rocks exactly resembling petrified wood. The only metal said by the ancients to be produced in Egypt is copper. On the road to Suez are found great numbers of Egyptian flints and pebbles, though the bottom is a hard, calcareous,

and sonorous stone. Volney tells us that the stones above-mentioned, which resemble petrified wood, are to be met with here. They are in the form, he says, of small logs cut slanting at the ends, and might easily be taken for petrifactions, though he thought them real minerals.

Besides camels, horses, asses, mules, sheep, black cattle, and other domestic *quadrupeds*, there are many wild animals in Egypt; particularly tigers, hyenas, antelopes, crocodiles, apes with heads resembling those of dogs, hippopotamuses, ichneumons, chameleons, yellow lizards, and a species of rats resembling ferrets, remarkably useful for destroying the crocodiles' eggs. Among the feathered tribe, there are ostriches, eagles, hawks, pelicans, and water fowls of various kinds, among which last the most remarkable is the ibis, a bird of the duck kind, which was deified by the ancient Egyptians, on account of its usefulness in destroying serpents, and noxious insects. These are numerous, and among the different species of serpents the cerastes, or horned viper, abounds, whose bite proves mortal, except to those who have the secret of charming it.

F. Sicard mentions two salt lakes situated in the desert west of the Delta, three or four leagues in length, and about a quarter of a league in breadth, with a solid and stony bottom. For nine months in the year they are without water; but in winter there oozes out of the earth a reddish violet-colored water, which fills the lakes to the height of five or six feet. This being evaporated, by the return of the heat, there remains a bed of salt two feet thick and very hard, which is broken in pieces with iron bars: and from these lakes no less than 30,000 quintals of salt are procured every year.

Besides the ordinary *winds* before mentioned, Egypt is infested, as we have also intimated, with the destructive blasts common to all warm countries which have deserts in their neighbourhood. These have been distinguished by various names, such as poisonous winds, hot winds of the desert, Samiel, the wind of Damascus, Kamsin, and Simoom. In Egypt they are denominated 'winds of fifty days, because they most commonly prevail during the fifty days preceding and following the equinox, though, should they blow constantly during one-half of that time, a universal destruction would be the consequence. Of these travellers have given various descriptions. M. Volney says that the violence of their heat may be compared to that of a large oven at the moment of drawing out the bread. They always blow from the south, and are undoubtedly owing to the motion of the atmosphere over such vast tracts of hot sand, where it cannot be supplied with a sufficient quantity of moisture. When they begin to blow, the sky loses its usual serenity, and assumes a dark, heavy, and alarming aspect, the sun laying aside his usual splendor, and becoming of a violet color. This terrific appearance seems not to be occasioned by any real haze or cloud in the atmosphere at that time, but solely by the vast quantity of fine sand carried along by those winds, and which is so excessively subtile that it penetrates every where. The motion of this wind is always rapid, but its heat is not intolerable till after it has continued for some time. Its pernicious qualities are evidently occasioned by its excessive avidity of moisture. Thus it dries and shrivels up the skin; and, by affecting the lungs in a similar manner, soon produces suffocation and death. The danger is greatest to those of a plethoric habit, or who have been exhausted by fatigue; and putrefaction soon takes place in the bodies of such as are destroyed by it. Its extreme dryness is such, that water sprinkled on the floor evaporates in a few minutes; all the plants are withered and stripped of their leaves; and a fever is instantly produced in the human species by the suppression of perspiration. It usually lasts three days, but is altogether insupportable if it continue beyond that time. The danger is greatest when the wind blows in squalls, and to travellers who happen to be exposed to its fury without any shelter. The best method in this case is to stop the nose and mouth with a handkerchief. Camels, by a natural instinct, bury their noses in the sand, and keep them there till the squall is over. The inhabitants, who have an opportunity of retiring to their houses, instantly shut themselves up in them, or go into pits made in the earth, till the destructive blast be over. The description of a blast of this kind which overtook Mr. Bruce in the desert of Nubia is still more terrible. See SIMOOM.

The *population* of Egypt is composed of Franks, or Europeans, Armenians, Greeks, Syrians, Christians, Jews, Turks, Arabians, and Copts, who are supposed, on very probable grounds, to be the descendants of the ancient Egyptians. The Franks are mostly from the shores bordering on the Mediterranean, and engaged in commerce and in the pacha's new manufactories; they do not exceed 1000, half of whom are in Alexandria, and the other half in Cairo. In spite of all the partiality and protection of the pacha, the Turks lose no opportunity of insulting and abusing these 'Christian dogs.' But our expeditions to this country seem to have resulted in two provisions, in favor of Europeans, that are remarkable enough:—1. At the peace of Amiens, Sir John Stuart demanded, and succeeded in obtaining, permission for Europeans to enter the western harbour of Alexandria, from which they had been jealously excluded, and permitted only to enter the eastern harbour, of which the water is shallow, the bottom rocky, and the anchorage dangerous: the one was formerly called the harbour of the Faithful, and the other that of Infidels. 2. No European or Christian was formerly permitted to ride on horseback in any part of Egypt, the horse being reserved for Mahommedans, while the ass was deemed the proper animal for Christians. This indignity was also abolished by the exertions of Sir John Stuart, who stipulated that all Europeans, without distinction, should be allowed to ride on horseback, which they still do.

There are about 2000 Armenians, who reside principally in the capital, where they exercise every kind of trade, and are much concerned in money transactions with the government. The Greek Christians of Syria may be reckoned at 3000 in Cairo, and 1000 in the other cities of

Egypt: they were formerly the wholesale merchants who supplied the land proprietors and others with various kinds of articles, and were in general wealthy; but the monopoly of the viceroy has very considerably impoverished them. There are about 5000 descendants of the ancient Greek colonists, who form quite a distinct race from the modern Greeks: these people have lost their ancient language, and speak a kind of Arabic; many of them are mariners, but in general they pursue the inferior and handicraft trades. According to the latest computations, there are about 4000 Jews in Egypt, 3000 of whom inhabit a part of Cairo, called after them the Jews' quarter, of which the streets are so narrow as to be almost impassable; the houses are dark, crowded together, filthy, and so infectious that, when the plague breaks out, the first enquiry is, If it has appeared in the Jews' quarter?

M. Mengin, the author of L'Histoire de l'Egypte, sous le Gouvernment de Mohammed Aly, reckons, in Cairo, eight persons to each house, and in the provinces four. The account then stands thus:

	Houses.	Inhabit.
In Cairo	25,000	200,000
In the provincial towns of Alexandria, Rosetta, Damietta, Old Cairo, and Boulak	14,532	58,128
In fourteen provinces, containing 3475 villages .	564,168	2,256,272
	603,700	2,514,400

Cairo being the only city of Egypt which contains any great accumulation of inhabitants, built by Gaubar, a general in the service of the first khalif of the race of the Fatemites of Egypt, in the year 358 of the hegira (968 of the Christian æra), it was surrounded with walls by Saladin. For the last 300 years its splendor has declined considerably; and the palaces of Mohammed Aly are mean and ill contrived. But here are 240 principal streets, forty-six public places, seven bazaars, 140 schools, 300 public cisterns, and 400 mosques.

The Copts are by far the most numerous class of Christians in Egypt, amounting at least to 60,000, of whom about 10,000 inhabit the two most populous quarters of Cairo. In towns they practise different trades, but the greater part of them labor on the lands, among the Fellahs. Under the government of the Mamelukes the Copts were employed in taking an account of, and collecting, the revenues of the villages; and many of them still hold situations of this kind, and as writers about the court. They are austere and forbidding in their manners, generally silent, and wearing an air of melancholy: but are said to be tyrannical when in authority.

The oriental race of Fellahs compose the chief part of the population of Egypt, a mixture, perhaps, of ancient Egyptians, Arabians, and Syrians; they approach nearest to the Copts, in general appearance and manners, but they are rigid Mussulmen, and strictly observe the rites and ceremonies laid down by their sheiks or priests. They labor hard on the soil, and live in the most abstemious manner on dourra, dwell in cottages of unbaked bricks, are clothed in coarse woollen cloth, and sleep on mats: those in the towns exercise handicraft trades, and keep shops in the bazaars, which they only quit to attend the mosques. Like all orientals, they are fond of frequenting coffee-houses, and listening to the tales of pretended magicians, or the rude music of strolling singers. In meekness and apathy they cannot be exceeded.

'The tented Arab,' says an able article on Egypt in the Quarterly Review, 'hovering with his flocks along the borders of the fertile valley of the Nile, is the same in character, manners, and customs, as he every where else is, and apparently has been, in all times since the days of the patriarchs, regarding with disdain and proud independence all other classes of mankind, but more particularly those of his own nation, who, in his eyes, have degraded themselves by taking up their abodes in fixed habitations, and whom he calls in contempt haty, or Arabs of the walls. Those who turn cultivators are equally despised, and considered in the light of Fellahs, with whom an alliance by marriage would be regarded as dishonorable. The Arab women have fine features and complexions; they are much fairer than the Egyptian women, and far more correct in their conduct. In cases of infidelity, the injured party takes the law into his own hands, and the culprit is generally punished with death.'

The Egyptian women, like other oriental females, are the mere slaves of their husbands' or their owners' caprices; and thus their degraded condition is one of the greatest obstacles to the civilisation of Egypt, and one of the last that will probably be removed, connected as it is with the precepts of the Mahommedan law. M. Mangin, however, states the women of late, whether married, or slaves from Georgia, Circassia, and Mongrelia, are allowed frequently to quit the harem, and that accompanied by a confidante, under pretext of going to the bath, or of making visits, they indulge with impunity in illicit amours.

A *cady*, or judge, sent from the Porte annually, settles all lawsuits and criminal prosecutions: under him are the sheiks and others, learned in the law. A civil process is stated to cost about 4 per cent. of the value in dispute, of which the cady takes four-fifths for himself, and gives one-fifth to the other lawyers. All minor disputes and complaints are brought before the Kiaya-bey. His officers are the Agha of the janissaries, who is charged with maintaining good order, and especially among the soldiers; the ouali, or agha of the police, who looks after the thieves and prostitutes, on both of whom he levies contributions for the support of himself and his myrmidons. The moteceb regulates the weights and measures; the bache-agha has the direction of the patroles, and the spies who frequent the coffee-houses, bazaars, and other public places; and, in addition to these, there is a head-man in every quarter of the city for settling disputes and preserving peace. This is said to be so effectually done, that the streets of Cairo are as safe as those of London, except on occa-

sions when the military break loose or want of pay, or to avenge themselves of some grievance.

Of the information upon Egypt, afforded to us by the intelligent Dr. Clarke, the following is a summary:—In his passage from Acre to Aboukir, he witnessed a phenomenon, formerly noticed, but also by some writers strenuously disputed. 'As we were sitting down to dinner, the voice of a sailor employed in heaving the lead, was suddenly heard calling 'half four!' The captain, starting up, reached the deck in an instant; and almost as quickly putting the ship in stays, she went about. Every seaman on board thought she would be stranded. As she came about, all the surface of the water exhibited a thick black mud: this extended so widely, that the appearance resembled an island. At the same time no land was really visible, not even from the mast-head, nor was there any notice of such a shallow in any chart on board. The fact is, as we learned afterwards, that a stratum of mud, extending for many leagues off the mouths of the Nile, exists in a moveable deposit near the coast of Egypt, and, when recently shifted by currents, it sometimes reaches quite to the surface, so as to alarm mariners with sudden shallows, where the charts of the Mediterranean promise a considerable depth of water. These, however, are not, in the slightest degree, dangerous. Vessels no sooner touch them than they become dispersed; and a frigate may ride secure, where the soundings would induce an inexperienced pilot to believe her nearly aground.' —Vol. iii. p. 13.

He left Rosetta on the morning of August 10th, and proceeded up the Nile to Cairo, then occupied by the English and their Turkish allies. 'A vessel leaving Rosetta, is driven by the wind,' he says, 'with extraordinary velocity against the whole force of the torrent to Cairo, or into any part of Upper Egypt. For the purpose of her return, with even greater rapidity, it is only necessary to take down the mast and sails, and leave her to be carried against the wind by the powerful current of the river. It is thus possible to perform the whole voyage from Rosetta to Bulâc, the quay of Cairo, and back again, with certainty, in about seventy hours, a distance equal to 400 miles.'—p. 32.

Of the population, fertility, and beautiful groves of Lower Egypt, our traveller speaks with his usual eloquence.

Throughout the Delta irrigation is carried to a vast extent, but it is effected, for the most part, by artificial means; and an exaggerated idea of the effects of the Nile is conveyed by the beautiful description of Gray. Extensive canals on each side of the river conduct its waters to the utmost extent of their level, but the fields are many of them supplied by water-wheels, or the still simpler process of lading. The soil thus treated produces three crops in the year—clover, corn, and rice, of which the last is sown while the field is actually under water, a practice which, as Dr. Clarke observes, is alluded to by Solomon (Eccles. ii. 1). The eastern sycamore attains an enormous size, and its boughs are so bent by the prevalent winds as to make them resemble a peacock's tail. The fruit resembles in shape the common fig, but is smaller, dry and insipid. The thermometer stood at 90° in the shade, and the inhabitants of the country were walking about or engaged in the avocations of husbandry, in a state of perfect nakedness, and displaying a complexion of the darkest tawny. They arrived at Bulac at midnight, and were aroused the next morning with intelligence that the pyramids were in sight. What follows is in Dr. Clarke's best style.

'Never will the impression made by their appearance be obliterated. By reflecting the sun's rays, they appeared as white as snow, and of such surprising magnitude, that nothing we had previously conceived in our imagination had prepared us for the spectacle we beheld. The sight instantly convinced us that no power of description, no delineation can convey ideas adequate to the effect produced in viewing these stupendous monuments. The formality of their structure is lost in their prodigious magnitude: the mind, elevated by wonder, feels at once the force of an axiom, which, however disputed, experience confirms,—that in vastness, whatever be its nature, there dwells sublimity. Another proof of their indescribable power is, that no one ever approached them under other emotions than those of terror; which is another principal source of the sublime. In certain instances of irritable feeling, this impression of awe and fear has been so great, as to cause pain rather than pleasure; of which we shall have to record a very striking instance in the sequel. Hence, perhaps, have originated descriptions of the pyramids, which represent them as deformed and gloomy masses, without taste or beauty. Persons who have derived no satisfaction from the contemplation of them, may not have been conscious that the uneasiness they experienced was a result of their own sensibility. Others have acknowledged ideas widely different, excited by every wonderful circumstance of character and situation; ideas of duration, almost endless; of power, inconceivable; of majesty, supreme; of solitude, most awful; of grandeur, of desolation, and of repose.'—Vol. ii. pp. 44—46.

Dr. Clarke's description of Cairo is short, but very curious and interesting. He was sufficiently disgusted with it as the dirtiest metropolis in the world; but the picturesque crowd in its streets, and on its canals, and the foliage of its gardens, no less than the splendid panorama seen from the heights of the citadel, had sufficient beauty and novelty to repay this inconvenience. Here, as in South America, the lizard is the harmless inhabitant of all the gardens, and is seen hanging on the walls and ceilings of the best apartments. Swarms of flies filled every dish and every drinking vessel, and the climate, though extolled as delightful by the British officers who had arrived from India, appeared to Dr. Clarke only tolerable to those who could reconcile themselves to the listless and sordid inactivity of the natives and settled Franks. Dr. Clarke recognised in the funeral cries of Egypt the same mournful notes, and the repetition of the same syllables which are used, on similar occasions, by the Russians and the Irish. In his observations on the mummy-pits, he is led to

animadvert on the falsehood of the common opinion, that the mummies were placed upright in these cemeteries, and supposes that the words of Herodotus, which have been generally quoted to this effect, relate only to those particular mummies which were kept in the houses of their descendants. The horses of our author's Arab guides were the finest he had seen in the whole course of his travels; and the Arab grooms were regarded by the English officers as superior to those even of their own country. These horses do not lie down at night, but sleep standing, with one foot fastened to the piquet.

Dr. Clarke supposes, from the decay of the obelisks at Alexandria, and from similar appearances on other ancient buildings, that granite, namely, from the decomposition of its feldspar by exposure to the atmosphere, is less calculated for works of duration than pure homogeneous marble, or even than common limestone. Of the two obelisks known by the name of Cleopatra's Needles, one only is now standing. A subscription was raised by several officers of our army and navy to remove to Great Britain its fallen companion, which, as it now lies on the sand, measures seven feet square at the base, and sixty-six feet in length. Lord Cavan presided in this undertaking, which was worthy of the ancient Romans, and would, probably, have been attended with complete success, had not, for some unexplained reason, the sailors of our fleet been forbidden to assist in the labor. Dr. Clarke gives some probable reasons why the emperor named in the inscription on the base of Pompey's Pillar is not, as is generally supposed, Diocle-sian but Hadrian, and attempts also to prove that this magnificent monument was really erected to the unfortunate general whose name tradition has assigned to it. The Arabs, it seems, call it the ruins of 'Julius Cæsar's palace.' Our author is among the first who has done sufficient justice to the regularity of the plan of the catacombs of Alexandria; the chaste and awful simplicity of their ornaments, and the long and gloomy arcades of this subterranean city of death. Twelve large halls, besides many smaller apartments, surrounded with places adapted to receive bodies in a recumbent posture, are disposed in a form not very dissimilar from the ancient symbol of the trident, and conclude with a circular sanctuary covered with a simple dome, which is hewn, like all the rest, in the solid rock. In this part of the excavation an ornament appears, which colonel Squire took for a crescent, but which Dr. Clarke more probably apprehended to be the winged globe, which, according to Macrobius, was the Egyptian symbol of Serapis, the lord of the dead. With this visit to Alexandria, Dr. Clarke's Egyptian travels concluded. See ALEXANDRIA.

The splendid antiquities and ancient literature of Egypt have been abundantly illustrated by recent travellers and writers. The labors of the French Institute at Cairo are entitled, perhaps, to our first notice, for their stupendous and magnificent Déscription de l'Egypte. We may next mention Mr. William Hamilton's Ægyptiaca, 4to. Lond. 1809, originating with the first British expedition. In October, 1801, captain Leake and lieutenant Hayes were appointed by general Hutchinson, to make a survey of Egypt, and of the country beyond it, if it should be found practicable; and Mr. Hamilton joined these gentlemen in their expedition. Partly, however, on account of the disturbed state of the country, they were unable to proceed further south than a few hours' journey beyond Syene, to a village called Debôd, opposite to which they observed the ruins of Barembre, the Parembole of the ancients; here also they found a Greek dedication of a temple to Isis, by Ptolemy Philometor and his queen. But they collected a variety of inscriptions from other parts of Egypt, to which they added drawings and descriptions of the architectural remains to which they belonged. At Alexandria Mr. Hamilton was enabled, in company with some other gentlemen, by examining the inscription on Pompey's pillar, in different positions of the sun, to ascertain the name Dioclesian, as that of the emperor to whom it was dedicated; and to find some traces of the name of Pompeius, a prefect of Egypt under that emperor.

Mr. Legh visited Egypt in 1812, and extended his observations as far as Itrim, within about three days' journey of the second cataract of the Nile. Accompanied by the Rev. Mr. Smelt, he engaged as an interpreter, on leaving Cairo for Upper Egypt, an American, of the name of Barthow, who had resided many years in the country. They sailed on the 13th January, and their first landing was at the ruinéd village of Benihassen, where they visited the excavations which Norden ascribes to 'holy hermits, who made their abodes there.' The principal chamber is sixty feet in length, and forty in height; to the south of it are seventeen smaller chambers, and probably the like number to the north. Mr. Legh says, they found it difficult to follow Mr. Hamilton's descriptions of the paintings which cover the walls of the chambers. At Ashmounien, the site of the ancient Hermopolis, they partook of the enthusiasm with which Denon speaks of its splendid ruins; but Mr. Legh observes, that his delineation of them denotes the haste with which he travelled, for that the winged globe, represented by him on the frieze, does not exist in the original. Indeed, he found that Denon is very little to be depended on, where he does not copy from preceding travellers, or from the actual fragments carried away by the French. By his own account, he has drawn and described objects seen only in galloping past them; and, at the best, laboring under the horror of a hostile visit from the Arabs or Mamelukes. At Siout, which has succeeded to Girgeh, as the capital of Upper Egypt, they fell in with Burckhardt, travelling as Shekh Ibrahim, on his way to the Great Oasis, where a tribe of Bedouins had lately established themselves. Ibrahim Bey, the eldest son of the pacha, here received them with considerable civility. Reaching Gaw-el-Kebir, the ancient Antæopolis, on the 28th, they found the portico of the temple still standing, in the midst of a thick grove of dates, and consisting of three rows, each of six columns; they are eight feet in diameter, and, with their entablature, sixty-two feet high. Mr

Legh thinks this venerable and gigantic ruin the most picturesque in Egypt; the columns, architraves, and every part of the building, are covered with hieroglyphics. At the farthest extremity of the temple is an immense block of granite, of a pyramidal form, twelve feet high, and nine feet square at the base, in which is cut a niche, seven feet high, four feet wide, and three feet deep.

Our travellers were forcibly struck with the luxuriant fertility of the soil along the banks of the Nile, as contrasted with the wretched state of poverty and misery of the inhabitants. 'The fields, enriched by the Nile, teem with plenty; the date-trees here are loaded with fruit; cattle of every kind, poultry, and milk, abound in every village; but the wretched Arab is compelled to live on a few lentils, and a small portion of bread and water, while he sees his fields plundered and his cattle driven away, to gratify the insatiable wants of a mercenary soldier, and the inordinate claims of a rapacious governor. After having paid the various contributions, and answered the numerous demands made upon him, not a twentieth of the produce of his labor falls to his own share; and without the prospect of enjoying the fruits of his toil, the Fellah, naturally indolent himself, allows his fields to remain uncultivated, conscious that his industry would be but an additional temptation to the extortion of tyranny.' p. 42.

Between Cafr Saide, supposed to be the site of Chenoboscia, and Diospolis Parva, the modern How, they observed, for the first time, some crocodiles basking on the sand-banks in the river, the largest apparently about twenty-five feet long. Mr. Legh thinks Girgeh the limit below which they do not descend; and they appear to be most numerous between this place and the cataracts. The superstitious natives, we are told, attribute the circumstance of crocodiles not being observed in the lower parts of the Nile, to the talismanic influence of the Mikkias, or Nilometer, at Cairo.

A fair wind wafted the travellers past Dendera, Koptos, and Kous, and on the 7th February they landed on the plain of Thebes, the city of a hundred gates, the theme and admiration of ancient poets and historians, and the wonder of every traveller in every age. The ruins extend from each bank of the Nile to the sides of the enclosing mountains. The objects which most powerfully attract the attention on the eastern side, are the magnificent temple of Karnac, and the remains of the temple of Luxor; the latter of which, Mr. Legh says, mark the southern extremity of the walls of the city on that side of the river. On the opposite, or western bank, are the Memnonium, the two colossal statues, and the remains of Médinet-Abou. The Necropolis, or celebrated caverns, known as the sepulchres of the ancient kings of Thebes, are excavations in the mountains, covered with sculptures and paintings, still in the highest degree of preservation. Of these, Mr. Legh gives no description, which indeed, without engravings, would have been of little use. For the most ample, laborious, and accurate details of these ancient ruins, says the Quarterly Reviewer, we must still consult the learned and indefatigable Pococke.

The time passed by Mr. Legh at Essouan was employed in visiting the islands of Elephantina, Philæ, and the cataracts. 'Elephantina,' he says, 'is celebrated for its beauty, and certainly contains within itself every thing to make it one of the most enchanting spots in the world: woods, gardens, canals, mills, rivers, and rocks, combine to make it picturesque.' Eight temples, or sanctuaries, are crowded together on the island of Philæ, though its whole length does not exceed 1000 feet, nor its breadth 400. Mr. Legh thinks, from the present state of these temples, that the system of building among the ancient Egyptians, was first to construct great masses, and afterwards to labor for ages in finishing the details of the decorations, beginning with the sculpture of the hieroglyphics, and then passing to the stucco and painting. He tells us also, that the granite quarries, at the foot of the mountains, still bear the marks of the chisel and the wedge; 'and that the unfinished obelisks, columns, and sarcophagi, which are to be seen in great profusion, show the unwearied labor and mighty schemes of the ancient inhabitants.'

The cataracts of the Nile have been represented by former writers in exaggerated colors. This barrier, however, placed by nature between Nubia and Egypt, is in the highest degree magnificent.

'Passing upwards from Egypt, you leave the delicious gardens of the island of Elephantina, which divides the Nile into nearly two equal streams; and, on the left, the romantic and ruined town of Essouan strongly reminded us of the old gothic castles in England. Beyond, the two chains of primitive mountains, lying on each side the Nile, cross the bed of the river, and form innumerable rocky points or islands to impede its course. The wild disorder of the granite rocks, which present every variety of grotesque shape, the absence of all cultivation, the murmur of the water, and the savage and desolate character of the whole scene, form a picture which exceeds all power of description.' p. 54.

The boundary of the French expedition in Egypt was marked on a granite rock a little above the cataracts; and our travellers were earnestly exhorted by the Arab shekh at Essouan, not to think of proceeding further. But, as the Mamelukes were at a considerable distance, and the Barâbras at peace with the pacha of Egypt, they proceeded, and found a population of a character totally distinct from that of Egypt, its low sandy banks, its Copts, Arabs, Turks, and Jews. The natives are Barâbras, or Berebbers, or Berberins, the same who inhabit Mount Atlas and the interior parts of Barbary, to which they have given their name; a frugal, harmless, and honest people, subsisting chiefly on dates, millet, and a few leguminous plants; and rigid Mahommedans. For the first eighteen miles, the mountains are described as hemming in the Nile, leaving but few small patches that could possibly be cultivated, and these were generally planted with dates. But we must here leave our travellers, referring the reader to Mr. Legh's Narrative for their further route. Returning

down the Nile, they again visited the neighbourhood of Thebes, and landed at Manfalout, to examine some mummy-pits in the desert, near the village of Amabdi, of which they had heard an extraordinary account from a Greek, of the name of Demetrius. He told them, that in pursuing some fugitives, they were suddenly observed to disappear. On coming to the place, they found a pit, which he and some others descended; at the bottom were fragments of mummies of crocodiles scattered about, but no fugitives to be seen. This story raised the curiosity of our travellers, and they determined to visit those subterraneous chambers, in which the sacred crocodiles had been interred, and which [illegible] was not permitted to see.

The party was composed of Mr. Legh, Mr. Smelt, the American interpreter, an Abyssinian merchant of the name of Fadlallah, and three of their boat's crew, Barabras, whom they had brought from the Cataracts. Having wandered about four hours in search of Amabdi, they at length observed four Arabs cutting wood. These people showed an unwillingness to give them any information—talked of danger—and were heard to mutter that—'if one must die all must die':—this, however, did not deter the party from proceeding. The story of this adventure is so well told, and so interesting, that, though rather long, we give it in Mr. Legh's own words.

'We were bent on going, and the Arabs at last undertook to be our guides for a reward of twenty-five piastres. After an hour's march in the desert, we arrived at the spot, which we found to be a pit or circular hole of ten feet in diameter and about eighteen feet deep. We descended without difficulty, and the Arabs began to strip, and proposed to us to do the same: we partly followed their example, but kept on our trowsers and shirts. I had by me a brace of pocket pistols, which I concealed in my trowsers, to be prepared against any treacherous attempt of our guides. It was now decided that three of the four Arabs should go with us, while the other remained on the outside of the cavern. The Abyssinian merchant declined going any farther. The sailors remained also on the outside to take care of our clothes. We formed therefore a party of six: each was to be preceded by a guide—our torches were lighted—one of the Arabs led the way,—and I followed him.

'We crept for seven or eight yards through an opening at the bottom of the pit, which was partly choked up with the drifted sand of the desert, and found ourselves in a large chamber about fifteen feet high.

'This was probably the place into which the Greek, Demetrius, had penetrated, and here we observed what he had described, the fragments of the mummies of crocodiles. We saw also great numbers of bats flying about, and hanging from the roof of the chamber. Whilst holding up my torch to examine the vault, I accidentally scorched one of them. I mention this trivial circumstance, because afterwards it gave occasion to a most ridiculous, though to us a very important, discussion. So far the story of the Greek was true, and it remained only to explore the galleries where the Arabs had formerly taken refuge, and where, without doubt, were deposited the mummies we were searching for. We had all of us torches, and our guides insisted upon our placing ourselves in such a way, that an Arab was before each of us. Though there appeared something mysterious in this order of march, we did not dispute with them, but proceeded. We now entered a low gallery, in which we continued for more than an hour, stooping or creeping as was necessary, and following its windings, till at last it opened into a large chamber, which, after some time, we recognised as the one we had first entered, and from which we had set out. Our conductors, however, denied that it was the same, but on our persisting in the assertion, agreed at last that it was, and confessed they had missed their way the first time, but if we would make another attempt they would undertake to conduct us to the mummies. Our curiosity was still unsatisfied; we had been wandering for more than an hour in low subterranean passages, and felt considerably fatigued by the irksomeness of the posture in which we had been obliged to move, and the heat of our torches in those narrow and low galleries. But the Arabs spoke so confidently of succeeding in this second trial, that we were induced once more to attend them. We found the opening of the chamber which we now approached guarded by a trench of unknown depth, and wide enough to require a good leap. The first Arab jumped the ditch and we all followed him. The passage we entered was extremely small, and so low in some places as to oblige us to crawl flat on the ground, and almost always on our hands and knees. The intricacies of its windings resembled a labyrinth, and it terminated at length in a chamber much smaller than that which we had left, but, like it, contained nothing to satisfy our curiosity. Our search had hitherto been fruitless, but the mummies might not be far distant; another effort, and we might still be successful.

'The Arab whom I followed and who led the way, now entered another gallery, and we all continued to move in the same manner as before, each preceded by a guide. We had not gone far before the heat became excessive; for my own part, I found my breathing extremely difficult, my head began to ache most violently, and I had a most distressing sensation of fulness about the heart.

'We felt we had gone too far, and yet were almost deprived of the power of returning. At this moment the torch of the first Arab went out; I was close to him and saw him fall on his side—he uttered a groan—his legs were strongly convulsed, and I heard a rattling noise in his throat—he was dead. The Arab behind me, seeing the torch of his companion extinguished, and conceiving he had stumbled, past me, advanced to his assistance, and stooped. I observed him appear faint, totter, and fall in a moment—he also was dead. The third Arab came forward, and made an effort to approach the bodies, but stopped short. We looked at each other in silent horror. The danger increased every instant; our torches burnt faintly; our breathing became more difficult; our knees tottered under us, and we felt our strength nearly gone.

'There was no time to be lost—the American, Barthow, cried to us 'take courage,' and we

began to move back as fast as we could. We heard the remaining Arab shouting after us, calling us Caffres, imploring our assistance, and upbraiding us with deserting him. But we were obliged to leave him to his fate, expecting every moment to share it with him. The windings of the passages through which we had come increased the difficulty of our escape; we might take a wrong turn, and never reach the great chamber we had first entered. Even supposing we took the shortest road, it was but too probable our strength would fail us before we arrived. We had each of us separately and unknown to one another observed attentively the different shapes of the stones which projected into the galleries we had passed, so that each had an imperfect clue to the labyrinth we had now to retrace. We compared notes, and only on one occasion had a dispute, the American differing from my friend and myself; in this dilemma we were determined by the majority, and fortunately were right. Exhausted with fatigue and terror, we reached the edge of the deep trench which remained to be crossed before we got into the great chamber. Mustering all my strength, I leaped, and was followed by the American. Smelt stood on the brink, ready to drop with fatigue. He called to us 'for God's sake to help him over the fosse, or at least to stop, if only for five minutes, to allow him time to recover his strength.' It was impossible—to stay was death, and we could not resist the desire to push on and reach the open air. We encouraged him to summon all his force, and he cleared the trench. When we reached the open air it was one o'clock, and the heat of the sun about 160°. Our sailors, who were waiting for us, had luckily a bardak full of water, which they sprinkled upon us, but, though a little refreshed, it was not possible to climb the sides of the pit; they unfolded their turbans, and slinging them round our bodies, drew us to the top.'

The Arab who remained at the entrance anxiously enquired for his hahabebas, or friends; he was told they were employed in bringing out the mummies; the travellers then mounted their asses, and rode forward towards the boats with all speed, but were pursued; and being brought back to Manafalout, found great difficulty in escaping the vengeance of its inhabitants.

The accomplished, but unfortunate, Mr. Burckhardt left England on the 2d of March, 1809, for Malta, whence he set out for Aleppo, which he reached on the 6th of July. At this place and Damascus, he spent the principal part of the next three years; during which he made a variety of excursions into the Hauran and the Lesge, visited the ruins of Palmyra and Balbec, and perfected himself in the knowledge of the religion, manners, and language of the Mahommedan Arabs. On the 18th of June, 1812, he set out from Damascus for Cairo, avoiding the usual route of the sea coast and desert between El Arish and the borders of Egypt, and directing his course, in the disguise of the poorest of the Bedouins, from the Holy Land, east of the Jordan, by Szalt, into Arabia Petræa, and across the great desert El Ty; he reached Cairo on the 4th September, with the intention of availing himself of the first opportunity of penetrating into Africa, which the departure of a Fezzan or a Darfur caravan might afford him. Finding, however, that this was not likely soon to take place, he determined to pass the intermediate time in exploring Egypt, and the country above the Cataracts, and was thus enabled to perform two very arduous and interesting journeys into the ancient Ethiopia; one of them along the banks of the Nile from Assouan to Dar El Mahass on the frontiers of Dongola, in the months of February and March 1813, during which he discovered many remains of ancient Egyptian and Nubian architecture, with Greek inscriptions, such as are found in the temples of Philæ:—the other between March and July in the following year, through Nubia to Souakim and Djedda. The details of this journey, contained in his Travels, are said to be the best notices ever received in Europe of the actual state of society, trade, manufactures, and government in what was the cradle of all the knowledge of the ancient Egyptians.

Captain Light's Travels were published in 1818, and are chiefly valuable for the ill-executed but tolerably accurate prints of Egyptian antiquities which they contain. He had previously contributed to Mr. Walpole's Memoirs, relating to European and Asiatic Turkey, several curious decorations in the remains of the churches of Nubia. These Memoirs,contain also some papers of the late Mr. Davison, who was British consul at Algiers, and accompanied Mr. Wortley Montague to Egypt in 1763. In the great pyramid, Mr. Davison discovered a room, before unknown, immediately over the chamber which contains the sarcophagus; and descended the three successive wells, to the depth of 155 feet. He also well describes the catacombs of Alexandria. This volume likewise comprises an account of the customs and manners of modern Egypt by Dr. Hume. Nor should we forget the obligations which every writer on the geography of Egypt must in future owe colonel Leake's elegant two-chart map of that country, comprehending also a sketch of Nubia, as far as the southern cataract; the limit of all the existing antiquities.

The 'Memnon' or head of a colossal statue found at Thebes, now in the British Museum, was brought from that place to Alexandria at the joint expense of poor Burckhardt, and Mr. Salt, our consul in Egypt. It is considered the finest specimen of ancient Egyptian sculpture which has yet been discovered, and is formed of a single block of granite about ten tons in weight. Under the direction of M. Belzoni, it was moved by the sheer labor of the Arab peasantry two miles, and, without the aid of any kind of machinery, embarked on the Nile. The French, unable to remove it, attempted to blow off with gunpowder the large mass of hair behind, forming that bushy coëffure so common on Egyptian statues, and part of the Bust; fortunately the face has sustained no injury.

'By the indefatigable labor of (the late) M. Belzoni and Mr. Salt, the British Museum,' says the Quarterly Reviewer, 'is likely to become the richest depository in the world of Egyptian antiquities. They uncovered the front of the great sphynx, when numerous pieces of antiquity, as

unexpected as extraordinary, were developed, pieces which, for many centuries, had not been exposed to human eyes. Among other things, a beautiful monolithic temple of very considerable dimensions was discovered between the legs of the sphynx, having within it a sculptured lion and a small sphynx. In one of the paws of the great sphynx was another temple, with a sculptured lion standing on an altar. In front of the great sphynx were the remains of buildings, apparently temples, and several granite slabs with inscriptions cut into them, some entire and others broken. One of these is by Claudius Cæsar, recording his visits to the pyramids, and another by Antoninus Pius; both of which, with the little lions, are now in the British Museum. Several paint-pots were also found fronting the sphynx, with paint of different colors in them. At Thebes, M. Belzoni made many new and curious discoveries, and found many valuable relics which had escaped the ravages of the invading Persians and the modern Arabs: he has also uncovered six tombs of the kings of Egypt, which for centuries had not been entered, or, indeed, known. That of Apis he represents as uncommonly magnificent and interesting. 'It is certainly,' he says, 'the most curious and astonishing thing in Egypt, and impresses one with the highest idea of the workmanship of the ancient inhabitants. The interior, from one extremity to the other, is 190 feet, containing a great number of apartments and galleries. The walls are every where covered with hieroglyphics and bas-reliefs, in fresco colors, which are brighter than any color we have, and as fresh as if they had been only just laid on. But the finest antique in this place is in the principal chamber. It is a sarcophagus, formed of a single piece of alabaster, nine feet seven inches long, three feet nine inches wide, the interior and the exterior being equally covered with hieroglyphics and figures, hollowed with a chisel. This sarcophagus sounds like a silver bell, and is as transparent as ice; no doubt, when I shall have it transported to England, as I hope to do successfully, it will be esteemed as one of the most precious treasures of which any European museum can boast.'

The most important, however, of M. Belzoni's labors in Egypt was the opening of the second pyramid of Ghiza, known by the name of Cephrenes. But, for the particulars of this interesting operation and its results, see PYRAMIDS OF EGYPT; and, for some recent discoveries in regard to THEBES, the article of that title.

EHRENBREITSTEIN, a once celebrated fortress of Germany, in the Lower Electorate, considered as the key of the Rhine and the Moselle, is situated near Coblentz, on the opposite side of the Rhine. It included three fortresses, the chief of which was thus named, and the other two Thal and Vallendar. The value and strength of Ehrenbreitstein have been often mentioned by travellers, but were never so fully proved, as by the resistance it made to the French, during a siege and blockade of two years, in 1795 and 1796. In 1797 it was restored to Prussia; but the works were previously blown up. Though it is closely connected with the country behind the dreary district of Weteravia, it has the appearance towards the Rhine of being nearly insular, and perfectly pyramidal. The abruptness of its elevation above Coblentz, is so little diminished by the breadth of the river, that the rock may almost be said to threaten the city like a precipice; the streets being as open to inspection from the fortress, as those of a model on a table. The only entrance into the castle from the Rhine, is by a road cut in the solid rock, under four gateways. So long ago as the fifteenth century, three years were spent in digging a well through the solid rock, to the depth of 280 feet, as is mentioned in an inscription within the castle. The possession of this castle was confirmed to the elector of Treves, in 1660, by the treaty of Westphalia; but as it was considered one of the keys of Germany, towards France, the governor always took the oaths to the emperor and the empire, as well as the elector. The French plenipotentiaries at Rastadt demanded the cession of the fortress to the republic, which was obstinately refused by the deputies of the empire. At last it was mutually agreed that its fortifications should be demolished, but this was protested against by the Austrian deputy. From that period the French troops laid siege to it, notwithstanding the armistice concluded in 1797, and closely blockaded it till the 24th of January 1799, when it surrendered. At the bottom lies the small town of Thal-Ehrenbreitstein, which contains 3500 inhabitants; and carries on a brisk trade with Coblentz, by a bridge of boats across the Rhine.

EHRET (George Dionysius), F.R.S. an eminent botanical painter, son of a gardener of the prince of Baden Durlach, was born in 1710. Visiting Paris, he was employed in the garden of plants under the celebrated Jussieu, and then came to England. He went in 1736 to Holland, and made drawings for Cliffort of Amsterdam. Under the direction of Linnæus, who gave him lessons in botany, he formed the figures of plants for the Hortus Cliffortianus, published in 1737, and returning to England, in 1740, finally settled here. He was patronised by the duchess of Portland, Drs. Sloane, Mead, and Fothergill, Ralph Willet, Esq., and other persons of taste. He died in 1770.

EHRETIA, in botany, a genus of the monogynia order, and pentandria class of plants; natural order forty-first, asperifoliæ: FRUIT is a bilocular berry: SEEDS solitary and bilocular; the stigma emarginated.

EHRHARTA, in botany, a genus of the monogynia order, and hexandria class of plants: CAL. is a two-valved, abbreviated, and one-flowered glume: COR. a double glume, each two-valved; the exterior one compressed, and scymeter shaped, transversely wrinkled, and gashed at the base. There are six stamina, three on each side the pistil in a parallel line. The stigma is simple, compressed, four-tufted, and

torn at the top. Species nine, natives of the West Indies, and South America.

EJAC'ULATE, *v. a.* } Lat. *ejaculor*, from *e*
EJACULA'TION, *n. s.* } forth, and *jaculor* to
EJAC'ULATORY, *adj.* } hurl or throw, as a dart.

To dart out or shoot forth: applied metaphorically, to words or to acts of the mind. Ejaculation is used both for the act of darting or throwing out, and words (hence prayers) or things ejaculated: ejaculatory is throwing, or having the power of throwing out: hence, uttered shortly or suddenly, and sudden or hasty.

There seemeth to be acknowledged, in the act of envy, an *ejaculation* or irradiation of the eye.
Bacon's Essays.

In your dressing let there be *ejaculations* fitted to the several actions of dressing; as at washing your hands, pray to God to cleanse your soul from sin.
Taylor's Guide to Devotion.

The continuance of this posture might incline to ease and drowsiness; they used it rather upon some short *ejaculatory* prayers, than in their larger devotions. *Duppa's Devotion.*

We are not to value ourselves upon the merit of *ejaculatory* repentances, that take us by fits and starts.
L'Estrange.

Being rooted so little way in the skin, nothing near so deeply as the quills of fowls, they are the more easily *ejaculated*. *Grew's Museum.*

The mighty magnet from the centre darts
This strong, though subtile force, through all the parts:
Its active rays *ejaculated* thence,
Irradiate all the wide circumference. *Blackmore.*

He whose *ejaculatory* uses of God's name are not prayers for some one, will find them curses to himself. *Thomas.*

EICHSFELD, a province of Prussia (in part ceded to that power by Hanover, in 1818), and part of the present principality of Calenberg. It is divided into the Upper and Lower Eichsfield, and contains 90,000 inhabitants. The other and larger part, not belonging to Hanover, was a part of the electorate of Mentz.

EICHSTADT, a town and bishop's see of Bavaria, in the circle of the Upper Danube, situated in a valley on the Alt. The king of Bavaria conferred the title of prince of Eichstadt on Eugene Beauharnois, his son-in-law, formerly viceroy of Italy. A convent in this town is much visited by zealous Catholics as containing a supposed relic of St. Wilibald. Population 6000. Thirty-two miles N. N. E. of Augsburg.

EICK (John Van), a celebrated Flemish painter, commonly called John of Bruges, from his birth place, flourished in the fifteenth century, and was the first who discovered the method of painting in oil. Being a chemist, he found in the course of his experiments, that, by grinding colors with linseed or nut oil, he could form them into a solid body which would resist water, and not need the varnish used in painting in water colors or in fresco. He presented the first picture painted in this manner to Alphonsus I. king of Naples, who was much pleased with it.

EIDER DUCK. See ANAS.

EIGG, an island of the Hebrides, six miles in length and from one to three in breadth, containing a superficial area of about eleven square miles. Kelp and wool are yielded here, together with a few horses. The clergyman has several other small islands under his charge, and, in visiting Cannay, has to perform a voyage of twenty-four miles. There is also a resident Roman Catholic clergyman. Distant from the shore of Scotland eight miles.

EJECT,' *v. a.* } Fr. *jetter*, from Lat. *ejicio*,
EJECT'ION, *n. s.* } *ejectum*; i. e. *e* out, and *jacio* to hurl. To throw out; expel: hence to cast away; discharge.

To have *ejected* whatsoever the church doth take account of, be it never so harmlesss in itself, and of never so ancient continuance, without any other crime to charge it with, than only that it hath been the hap thereof to be used by the church of Rome, and not to be commanded in the word of God, could not have been defended. *Hooker.*

We are peremptory to dispatch
This viperous traitor; to *eject* him hence,
Were but our danger; and to keep him here,
Our certain death; therefore it is decreed
He dies to night. *Shakspeare. Coriolanus.*

Infernal lightning sallies from his throat!
Ejected sparks upon the billows float! *Sandys.*

It was the force of conquest; force with force
Is well *ejected*, when the conquered can. *Milton.*

The French king was again *ejected* when our king submitted to the church. *Dryden.*

Tears may spoil the eyes, but not wash away the affliction; sighs may exhaust the man, but not *eject* the burthen. *South.*

The heart, as said, from its contracted cave,
On the left side *ejects* the bounding wave.
Blackmore.

Will any man say, that if the words whoring and drinking were by parliament *ejected* out of the English tongue, we should all awake next morning chaste and temperate. *Swift.*

These stories are founded on the *ejection* of the fallen angels from heaven. *Broome.*

EJECTION, in Scotish law, is the turning out the possessor of any heritable subject by force; and is either legal or illegal.

1. EJECTION, ILLEGAL, is one person's violently turning another out of possession, without lawful authority.

2. EJECTION, LEGAL, is where a person having no title to possess, is turned out by the authority of law.

EJECTMENT, in English law, a writ or action which lies for the lessee for years, on his being ejected or put out of his land before the expiration of his term, either by the lessor or a stranger. It may also be brought by the lessor against the lessee, for rent in arrears, or holding over his term, &c. Ejectment of late is become an action in the place of many real actions, as writs of right, formedons, &c., which are very difficult, as well as tedious and expensive; and this is now the common action for trial of titles and recovering of lands, &c., illegally held from the right owner: yet where entry is taken away by descents, fines, recoveries, disseisins, &c. an ejectment shall not be brought; whereby we find that all titles cannot be tried by this action. The method of proceeding in the action of ejectment is to draw up a declaration, and feign therein a lease for three, five, or seven years, to him that would try the title; and also feign a casual ejector or defendant; and then deliver the declaration to the ejector, who serves a copy of it on the tenant in

possession, and gives notice at the bottom for him to appear and defend his title; or that he, the feigned defendant, will suffer judgment by default, whereby the true tenant will be turned out of possession; to this declaration the tenant is to appear at the beginning of next term by his attorney, and consent to a rule to be made defendant, instead of the casual ejector, and take upon him the defence, in which he must confess lease, judgment, entry, and ouster, and at the trial stand upon the title only: but in case the tenant in possession does not appear, and enter into the said rule in time, after the declaration served, then, on affidavit being made of the service of the declaration, with the notice to appear as aforesaid, the court will order judgment to be entered against the casual ejector by default; and thereupon the tenant in possession, by writ habere facias possessionem, is turned out. On the trial in ejectment, the plaintiff's title is to be set forth from the person last seised in fee, under whom the lessor claims down to the plaintiff, proving the deeds, &c., and the plaintiff shall recover only according to the right which he has at the time of bringing his action. And here, another who has title to the land, may be defendant in the action with the tenant in possession; for the possession of the lands is primarily in question, and to be recovered, which concerns the tenant, and the title thereto is tried collaterally, which may concern some other.

Ejectment ought to be brought for a thing that is certain; and if it be of a manor, the manor of A, with the appurtenances; if of a rectory, the rectory of B, &c. And so many messuages, cottages, acres of arable land, meadow, &c., with the appurtenances in the parish of, &c. For land must be distinguished, how much of one sort, and how much of another, &c., Cro. Eliz. 339. 3 Leon. 13. Ejectment lies of a church, as of an house called the parish church of, &c. And a church is a messuage, by which name it may be recovered: and the declaration is to be served on the parson who performs divine service. 11 Rep. 25. 1 Salk. 256. A rector may recover in ejectment against his lessee, on the ground of the lease of the rectory being avoided on account of his own non-residence, by force of the 13 Eliz. c. 20, and the lease to the defendant, describing him as doctor in divinity, produced by him at the trial in support of his title, is primâ facie evidence of his being such as he is therein described to be, so as to avoid the lease under stat. 21 Hen. 8. c. 13. § 3. It lies de uno messuagio sive burgagio; but not de uno messuagio sive tenemento, unless it have a vocat A. &c. to make it good, because of the uncertainty of the word tenement. 1 Sid. 295. But for a messuage and tenement hath been allowed. 1 Term Rep. 11. So indeed for a messuage or tenement. 3 Wils. 23. 3 Mod. 328. 1 Sid. 295. but see contra, 1 East's Rep. 441, 2. It will lie for a moiety, or third part of a manor or messuage, &c. And for a chamber or room of a house well set forth. 11 Rep. 55. 59. 3 Leon. 210. It lieth de domo, which hath convenient certainty for the sheriff to deliver possession, &c. Cro. Jac. 654. It lies of a cottage or curtilage; of a coal-mine, &c. but not of a common, piscary, &c. Cro. Jac. 150. For underwood it lies, though a præcipe doth not. 2 Roll. Rep. 482, 483. But for uno clauso, or una pecia terræ, &c. without certainty of the acres, and their nature, it doth not lie. 11 Rep. 55. 4 Mod. 1. It lieth of a close, containing three acres of pasture, &c. Also of so many acres of land covered with water; though not de aquæ cursu. Cro. Jac. 435. 1 Brownl. 242. It also lies for a prebendal stall, after collation to it. 1 Wils. 14.

EIGHT, *adj.*, EIGHTH, *agt*, EIGHTEEN', EIGHTEEN'TH, EIGHT'FOLD, EIGHTH'LY, *adv.*, EIGHT'IETH, *adj.*, EIGHTSCORE', EIGHT'Y. Sax. eahta, æhta; Belg. *acht*; Scottish and Teut. *acht*; Goth. *ahta*, *attha*, and *ath*; Dan. *atte*; Fr. *huit*; Lat. *octo*; Gr. οκτο. A word of number; twice four. Eighth is the ordinal of eight: eightfold is eight times the number or quantity; eighthly is in the eighth place; eighteen, eight and ten; eightscore, eight twenties; eighty, eight ten times told.

And it was don aftir these wordis almeest *eighte* dayes: and he took Petre and James and Jon, and he stiede into an hil to preye. *Wiclif. Luke* ix.

And it was doon in the *eightithe* day thei camen to circumside the child, and thei clepiden him Zacarye by the name of his fadir. *Id. Luk* i.

And as the *eyghtene* on which the tower in Siloa fel doun and slough hem, gessen ye for thei weren dettouris more than alle men that dwellen in Jerusalem? *Id. Luk.* xiii.

In the *eighteenth* year of Jeroboam died Abijam. 1 *Kings.*

Another yet?—A seventh! I'll see no more;
And yet the *eighth* appears. *Shakspeare. Macbeth.*

He can't take two from twenty, for his heart,
And leave *eighteen*. *Id. Cymbeline.*

What! keep a week away? seven days and nights?
Eightscore eight hours? and lovers absent hours,
More tedious than the dial *eightscore* times?
Oh weary reckoning! *Id. Othello.*

Eighty odd years of sorrow have I seen,
And each hour's joy wrecked with a week of teen.
Shakspeare.

In the *eighth* month should be the reign of Saturn. *Bacon.*

Eighthly, living creatures have voluntary motion, which plants have not. *Bacon's Natural History.*

This island contains *eightscore* and *eight* miles in circuit. *Sandys's Journey.*

Among all other climacterick three are most remarkable; that is, seven times seven, or forty-nine; nine times nine or *eighty* one; and seven times nine, or the year sixty-three, which is conceived to carry with it the most considerable fatality.
Browne's Vulgar Errours.

If men naturally lived but twenty years, we should be satisfied if they died about *eighteen*; and yet *eighteen* years now are as long as *eighteen* years would be then. *Taylor.*

A pedant values phrases, and elects them by the sound, and the *eight* parts of speech are his servants. *Overbury.*

Some balances are so exact as to be sensibly turned with the *eightieth* part of a grain.
Wilkins's Math. Magic.

I stay reluctant seven continued years,
And water her ambrosial couch with tears;

The *eighth* she voluntarily moves to part,
Or urged by Jove, or her own changeful heart.
Pope.

I thus passed about *eighteen* months in London, working almost without intermission at my trade, avoiding all expense. *Franklin.*

Oft, where his feathered foe had reared her nest,
And laid her eggs and household gods to rest,
Burning for blood in terrible array,
The *eighteen*-inch militia burst their way;
All went to wreck; the infant foemen fell,
When scarce his chirping bill had broke the shell.
Beattie.

EIGNE, *adj.* Fr. *aisne.* In law, denotes the eldest or first born. Here it signifies unalienable, as being entailed.

It happeneth not seldom, that, to avoid the yearly oath, for averment of the continuance of some estate for life, which is *eigne*, and not subject to forfeiture for the alienation that cometh after it, the party will offer to sue for a pardon uncompelled before the time; in all which, some mitigation of the uttermost value may weli and worthily be offered. *Bacon.*

EIMBECK, an old town of Hanover, on the Ilme, with 5000 inhabitants. It belonged to the Hanseatic confederacy, and has some manufactures, but is not thriving. Great part of its fortifications were demolished by the French in 1761. Forty-eight miles S.S.W. of Brunswick.

EIMEO, or Movea, one of the Society Islands in the South Pacific, about ten miles in length by five in breadth. The harbour of Taloo on the north coast is the best; and here the water is so clear, that the branching of beautiful coral is visible at great depths. The island is hilly and rocky, with valleys interposed. Twelve miles west of Otaheite.

EINURA, or Yennoor, a town in the district of South Canara, Hindostan, containing eight temples belonging to the Jain, and one to the Siva Brahmins. The former have an annual allowance of fourteen and the latter ten pagodas. There is an immense colossal image here of one of the gods of the Jains, which stands in the open air. It is formed of one solid piece of granite. The hills and neighbourhood about this place are considered unproductive.

EI'SEL, *n. s.* Sax. eopil. Vinegar; verjuice; any acid. An old word.

Cast in thy mind
How thou resemblest Christ, as with sowre poison
If thou paine thy taste; remember therewithall,
How Christ for thee tasted *eisel* and gall.
Sir T. More.

EISENACH, a principality of Germany in Thuringia, and circle of Upper Saxony, situated on the confines of Hesse. It is mountainous, and scarcely produces corn enough for the inhabitants. Some indifferent wine is made: but it has mines of copper, iron, vitriol, and alum, with some salt springs. It gave a vote to the duke of Saxe Weimar, in the diets and assemblies of the circle. Population 62,000. Its rivers are the Warra, Slade, Unstrut, and Fulda.

Eisenach, the capital of the above province, is situated on a rising ground near the junction of the Hesse and Horsa. It has a castle in the market-place as old as the eleventh century, and formerly the residence of the princes of Eisenach. The streets are neat and well built. Population 5000. On a high mountain in the immediate neighbourhood stands the castle of Wartburg, remarkable as the prison of Luther in 1521, when the elector of Saxony judged his temporary confinement expedient. Eisenach has a few coarse woollen manufactures. It experienced, on the 1st of September, 1810, a severe calamity, three powder waggons having exploded in the streets, and destroyed many houses. Twenty-six miles W.S.W. of Erfurt, and forty east of Weimar. Long. 10° 20′ 15″ E., lat. 50° 58′ 55″ N.

EISENARTZ, a town of Upper Styria, containing 1350 inhabitants. It is 2190 feet above the level of the sea, at the foot of a hill which contains one of the richest iron mines known. This was discovered in 712, and still produces 50,000 tons of ore yearly, giving employment to 2500 miners and smelters. Ten miles north of Leoben.

EISENBERG, a town of Germany, in the principality of Altenburg. It has a castle and a few manufactures; being situated on an eminence near the Saale. Twenty miles west of Altenburg, and thirty south-west of Leipsic. Population 3300.

Eisenburg, a county of Lower Hungary, on the borders of Austria and Styria, adjoining the counties of Oldenburg, Sala, and Wesprim. It is exceedingly fertile and populous, containing near 300,000 inhabitants. Its rivers are the Roab, Rabnitz, Guns, Sala, and Mur. Great part of it is covered with wood; other parts are appropriated to pasture and the culture of the vine. The population is a mixture of Hungarians, Germans, Croatians, and Jews.

EISLEBEN, the capital of the county of Mansfeld, Prussia, is chiefly remarkable as the birth place of Luther. The house in which the reformer was born and died being burnt down in 1594, it was rebuilt at the expense of the town, and is now used as a public school. Here are four churches, all Lutheran, and about 5400 inhabitants. It is divided into the Old and New Town, and the suburbs; large vacancies having been made between the buildings, in consequence of the frequent fires that have ravaged this place. The adjacent mines of Mansfield afford employment to many of the inhabitants, two miles south-east of Mansfeld, and twelve west of Halle.

EI'THER, *pron.* & *conj.* Sax. egther; Scot. *aithau;* Goth. *aithwar*, or *aithau*, i. e. *eitt twar*, or *thera*, one of them. One of two, used improperly for each; any of an indeterminate number. Used distributively as a conjunction corresponding with or.

And Jhesus sayed to hem, Y axe you if it is leveful to do wel in the sabate or yuel; for to make saaf, *ethir* to leese. *Wiclif. Luk.* vi.

We doubt whether the Lord in different circumstances, did frame his people unto any utter dissimilitude, *either* with Egyptians or any other nation.
Hooker.

Lepidus flatters both,
Of both is flattered; but he neither loves,
Nor *either* cares for him.
Shakspeare. Antony and Cleopatra.

Henry VIII. Francis I. and Charles V. were so provident, that scarce a palm of ground could be gotten

ither of the three, but that the other two would he balance of Europe upright again. *Bacon.*

Ve never heard of any ship that had been seen to ve upon any shore of Europe; no nor of *either* East *or* West Indies. *Id. New Atlantis.*

)ur infirmity will not suffer any long intention, er of body or mind. *Bp. Hall. Contemplations.*

ioring made a fast friendship with Digby, *either* of n believing he could deceive the other. *Clarendon.*

n the process of natural beings, there seem to be e creatures placed, as it were, on the confines of eral provinces, and participating something of *either*. *Hale.*

Seven times the sun has *either* tropick viewed,
The Winter banished and the Spring renewed.
Dryden.

do not ask whether bodies do so exist, that the tion of one body cannot really be without the mo- n of another: to determine this *either* way, is to beg question for or against a vacuum. *Locke.*

So like in arms these champions were,
As they had been a very pair;
So that a man would almost swear,
That *either* had been *either*.
Drayton's Nymp.

What perils shall we find,
If *either* place, *or* time, *or* other course,
Cause us to alter the' order now assigned.
Daniel.

Either your brethren have miserably deceived us, *or* wer confers virtue. *Swift to Pope.*

The food of the cod is *either* small fish, worms, stacеous animals, such as crabs, large whelks, &c. d their digestion is so powerful, as to dissolve the eatest part of the shells they swallow. *Pennant.*

EJULATION, *n. s.* Lat. *ejulatio.* Outcry; mentation; moaning; wailing.

Instead of hymns and praises, he breaks out into *dations* and effeminate wailings. *Government of the Tongue.*

With dismal groans
And *ejulation*, in the pangs of death,
Some call for aid. *Philips.*

EKATERINADARA, a town in the govern- ent of Caucasus, Kuban Tartary, the capital the Tchernornorskie, or Cossacks of the Black ea. The late empress Catherine, after whom is called, removed a great body of Cossacks om the banks of the Dnieper to the eastern ores of the sea of Azoph, for the purpose of pelling the incursions of the Tartars, and anted them, in 1791, a territory of about 1000 uare miles, including the isle of Taman. In e succeeding year they founded their capital, hich resembles an extensive village in a forest. ach cottage has an area in front, with an avenue the finest oaks. The inhabitants choose their wn chief, and preserve the European manners.

EKATERINEBURG, or CATHERINEN- URG, a town of Asiatic Russia, in the province Isett, on the left bank of the river of that ame, and on the eastern side of the Uralian ain. It is surrounded by an earthen rampart, ith a chevaux de frize. Here are five churches, nd several well built stone houses. The neigh- ouring mountains afford vast variety of minerals, nd great works are carried on in Ekaterineburg, y the Russian government, as iron foundries, rges, &c., which manufacture cannon and nchors. An immense copper coinage also pro- duces 12,530 pieces daily. The workhouses are of brick, covered with thin iron plates. This is the seat of the supreme college for the ad- ministration of the mines and foundries of Siberia, Casan, Perm, and Orenburg, and takes cognisance of 114 foundries. There is besides a chamber for superintending the gold mines. Provisions are cheap and plentiful. Houses 2000.

EKATERINOGRAD, a town and fortress of Asiatic Russia, in the government of Caucasus, situated on the Malka, or Balk, a little above its junction with the Terek. It was founded in the year 1776, and remained the capital of the pro- vince of Caucasus, before being constituted a government in 1785. It is the strongest place on the Caucasian line of posts. Twenty-four miles north-west of Mozdok.

EKATERINOSLAV, or CATHERINOSLAF, a town and government of European Russia, con- stituted by the empress Catherine in 1784. When Paul I. incorporated it with the Crimea he gave the whole the name of New Russia, and changed the name of this town to Nowo- Rossizsk. The present emperor, however, re- stored the division of Catharine, distributing New Russia into the three governments of Cher- son, Taurida, and Ekaterinoslav. The last, though reduced in some measure from its original size, is still considerable, extending from 33° 40′ to 39° 20′ E. long., and from 47° to 49° N. lat., between the governments of Poltawa, Charkov, Voronetz, the Donski Cossacks, Taurida, and Cherson, and containing about 35,000 square miles, the surface consisting for the most part of dry steppes, little susceptible of culture, except on the banks of the Dnieper, Don, Donetz, Samara, and the other rivers. The climate is mild. The chief productions are hemp, corn, millet melons, and fruits. Here are all the common domestic animals, and an unusual quantity of bees. It is divided into eight counties. The inhabitants are computed at 560,000; the majority deriving their subsistence from the breeding of cattle. The most intelligent and thriving part are of foreign descent, viz. Greeks, Germans, or Moldavians.

EKE, *v.a.* & *conj.* Goth. *auk'an*; Sax.eacan; Icel. *auka*, to increase. Spenser frequently writes this word eek. To protract; lengthen; increase; supply deficiency. Hence, as a conjunction, it signifies also, likewise; beside; but is obsolete.

Yet holt thine anker, and thou maiest arive
There bountie bereth the key of my substaunce,
And *eke* thou haste thy beste frende alive.
Chaucer.

And *eke* full ofte a littell skare,
Vpon a bank, her men be ware,
Let in the streme, whiche with gret peine,
If any man it shall restreine. *Gower.*

I dempt there much to have *eked* my store,
But such *eking* hath made my heart sore. *Spenser.*

And *eke* huge mountaines from their native seat,
She would command themselves to beare away.
Id. Faerie Queene.

If any strength we have, it is to ill;
But all the good is God's, both power and *eke* will.
Id.

The little strength that I have, I would it were with you.
—And mine to *eke* out her's.
Shakspeare. As You Like It.

I speak too long; but 't is to piece the time,
To *eke* it, and to draw it out in length,
To stay you from election.
Id. Merchant of Venice.

Now, if 'tis chiefly in the heart,
That courage does itself exert,
'Twill be prodigious hard to prove,
That this is *eke* the throne of love. *Prior.*

Your ornaments hung all,
On some patched doghole *eked* with ends of wall.
Pope.

EKRON, a city and government of the Philistines. It fell by lot to the tribe of Judah, in the first division made by Joshua (xv. 45.) but was afterwards given to the tribe of Dan, (xix. 43.) It was situated near the Mediterranean, between Ashdod and Jamnia. Ekron was a powerful city, and it does not appear that the Jews were ever sole peaceable possessors of it: the Ekronites were the first who said that it was necessary to send back the ark of the God of Israel, in order to be delivered from those calamities which the presence of it brought upon their country. 1 Sam. v. 10. The idol Baalzebub was principally adored at Ekron. 2 Kings i. 2. &c.

ELA'BORATE, *v. a.* & *adj.* } Spanish and
ELA'BORATELY, *adv.* } Port. *elaborar;*
ELA'BORATENESS, *n. s.* } Ital. and Lat.
ELABORA'TION. } *elaborare*, from

e, out, and *laboro*, to labor. To produce or improve by labor: as an adjective, highly or laboriously finished or performed.

Formalities of extraordinary zeal and piety are never more studied and *elaborate* than when politicians most agitate desperate designs. *King Charles.*

At least, on her bestowed
Too much of ornament, of outward shew
Elaborate, of inward less exact. *Milton.*

Man is thy theme, his virtue or his rage
Drawn to the life in each *elaborate* page.
Waller.

To what purpose is there such an apparatus of vessels for the *elaboration* of the sperm and eggs; such a tedious process of generation and nutrition? *Ray.*

Politick conceptions, so *elaborately* formed and wrought, and grown at length ripe for delivery, do yet prove abortive. *South.*

Some coloured powders which painters use, may have their colours a little changed, by being very *elaborately* and finely ground. *Newton's Opticks.*

I will venture once to incur the censure of some persons for being *elaborately* trifling. *Bentley.*

Consider the difference between *elaborate* discourses upon important occasions, delivered to parliaments, and a plain sermon intended for the common people. *Swift.*

It is there *elaborately* shewn, that patents are good. *Id.*

They in full joy *elaborate* a sigh. *Young.*

In the theatre, the first intuitive glance, without any *elaborate* process of reasoning, would show, that this method of political computation would justify every extent of crime. *Burke.*

As the glands which produce the prolific dust of the anthers, the honey, wax, and frequently some odoriferous essential oil, are generally attached to the corol, and always fall off and perish with it, it is evident that the blood is *elaborated* or oxygenated in this pulmonary system for the purpose of these important secretions. *Darwin.*

ELÆAGNUS, the oleaster, or wild olive, a genus of the monogynia order, and tetrandria class of plants; natural order sixteenth, calycifloræ: COR. none: CAL. campanulated, quadrifid, superior: FRUIT a plum below the campanulated calyx This genus must not be confounded with the oleaster or wild olive of Gerard, Parkinson, and Ray which is only a particular species of olive, called by Tournefort and Casper Bauhine, olea sylvestris. See OLEA. There are ten species.

1. E. inermis, without thorns, is the kind commonly preserved in the gardens of this country. The leaves are more than three inches long, and half an inch broad, and have a shining appearance like satin. The flowers come out at the foot-stalks of the leaves, sometimes singly, at other times two, and sometimes three, at the same place. The outside of the empalement is silvery and studded; the inside of a pale yellow. It has a very strong scent. The flowers appear in July, and are sometimes succeeded by fruit.

2. E. latifolia, with oval leaves, is a native of Ceylon, and some other parts of India. In this country it rises with a woody stem to eight or nine feet, dividing into many crooked branches, garnished with oval and silvery leaves, which have several irregular spots of a dark color on the surface. They are placed alternately on the branches, and continue all the year.

3. E. spinosa, the eastern broad-leaved olive with a large fruit, is a native of the Levant and some parts of Germany. The leaves are about two inches long, and one and a half broad in the middle. They are placed alternate, and are of a silver color: at the foot-stalk of every leaf there comes out a pretty long sharp thorn, which are alternately longer: the flowers are small, the inside of the empalement is yellow, and they have a strong scent when fully open.

The first and last species may be propagated by laying down the young shoots in autumn. They will take root in one year; when they may be cut off from the old trees, and either transplanted into a nursery for two or three years, or into places where they are to remain. The proper time is in the beginning of March, or early in autumn. They should be screened from high winds; for they grow very freely, and are apt to be split by the wind, if too much exposed. The latifolia is too tender to endure the open air of this country; and therefore must be kept in a warm stove, except during a short time in the warmest part of summer. From the flower of these plants an aromatic and cordial water has been drawn, which is said to have been successfully used in putrid and pestilential fevers.

ELÆOCARPUS, in botany, a genus of the monogynia order, and polyandria class of plants: COR. pentapetalous and lacerated: CAL. pentaphyllous: FRUIT a plum with a wrinkled kernel. Species five, natives of India and New Zealand.

ELÆOMELI, in ancient medicine, a sweet oil, as thick as honey, said to flow from a tree in Syria, and to have been useful in bilious complaints.

ELÆOTHESIUM, in antiquity, the anointing room, or place where those who were to

ıtle or had bathed, anointed themselves. See NASIUM.

LAH, the son of Baasha, the fourth king of el after the separation of the ten tribes from ah. He was murdered while in a state of xication, by Zimri, when he had reigned two years, A. M. 3014, and A.A.C. 934.

LAH, in ancient geography, a valley of el, famous for the defeat and death of Goliath, Philistine, by David.

LAM, in ancient geography, a country fre-ıtly mentioned in Scripture, lying south-east Shinar. In the time of Daniel, (viii. 2.) ana seems to have been part of it; and, be- the captivity, it does not appear that the s called Persia by any other name. Elymæ Elymais are often mentioned by the ancients. lemy, though he makes Elymais a province Media, places Elymæ in Susiana, near the sea st. Stephanus takes it to be a part of Assyria; Pliny and Josephus more properly of Persia, ose inhabitants, the latter tells us, sprang n the Elamites. The best commentators ee, that the Elamites, who were the ancestors the Persians, were descended from Elam, the of Shem. It is likewise allowed, that the pired writers constantly intend Persia, when y speak of Elam and the kingdom of Elam.

ELA'NCE, *v. a.* Fr. *elancer*. To throw out; lart; to cast as a dart.

While thy unerring hand *elanced*
Another, and another dart, the people
Joyfully repeated Io! *Prior.*

Harsh words, that once *elanced*, must ever fly rrevocable. *Id.*

ELAPHEBOLIA, from ελαφος, a deer; in ecian antiquity, a festival in honor of Diana huntress. In the celebration a cake was de in the form of a deer, and offered to the ldess. It owed its institution to the following cumstance:—When the Phocians had been erely beaten by the Thessalians, they resolved, the persuasion of one Deiphantus, to raise a e of combustible materials, and burn their ves, children, and effects, rather than submit the enemy. This resolution was unanimously proved by the women, who decreed Deiphantus crown for his magnanimity. When every ng was prepared, before they fired the pile, y engaged their enemies, and fought with such perate fury, that they totally routed them, and ained a complete victory. In commemoration this unexpected success, this festival was insti-ed to Diana, and kept with great solemnity.

ELAPHEBOLIUM, in Grecian antiquity, the ıth month of the Athenian year, answering to latter part of February and beginning of ırch. It consisted of thirty days, and took its me from the elaphebolia which was celebrated it.

ELA'PSE, *v. n.* Lat. *elapsus*. To pass away; glide away; to run out without notice.

There is a docible season, a learning time in youth, ich, suffered to *elapse*, and no foundation laid, sel-n returns. *Clarissa.*

For when an old wood perished, and produced a rass, many centuries would *elapse* before another od could grow and perish again upon the same ound, which would thus produce a new stratum of morass over the other, differing indeed principally in its age, and perhaps as the timber might be different in the proportions of its component parts. *Darwin.*

Though years
Elapse, and others share as dark a doom,
They but augment the deep and sweeping thoughts
Which overpower all others, and conduct
The world at last to freedom! *Byron.*

ELASMIS, in natural history, a genus of talcs, composed of small plates in form of spangles, and either single, and not farther fissile, or, if complex, only fissile to a certain degree, and that in somewhat thick laminæ. Of these talcs there are several varieties, some with large and others with small spangles, which differ also in color and other peculiarities.

ELA'STIC, *adj.* } Fr. *elastique*, from Gr.
ELAS'TICAL, } ελαστης, of the verb ελαω;
ELASTI'CITY, *n. s.* } Heb. הלא, to impel or cast off. Springy; energetic. The force whereby bodies restore themselves to a position from which they have been displaced.

By what *elastick* engines did she rear
The starry roof and roll the orbs in air.
Blackmore.

If the body is compact, and bends or yields inward to pression, without any sliding of its parts, it is hard and *elastick*, returning to its figure with a force rising from the mutual attraction of its parts. *Newton's Opticks.*

The most common diversities of human constitutions arise from the solids, as to their different degrees of strength and tension; in some being too lax and weak, in others too *elastick* and strong. *Arbuthnot on Aliments.*

A lute-string will bear an hundred weight without rupture; but at the same time cannot exert its *elasticity:* take away fifty, and immediately it raiseth the weight. *Id.*

A fermentation must be excited in some assignable place, which may expand itself by its *elastical* power, and break through, where it meets with the weakest resistance. *Bentley.*

Me emptiness and dulness could inspire,
And were my *elasticity* and fire. *Pope.*

His form robust and of *elastic* tone,
Proportioned well, half muscle and half bone,
Supplies with warm activity and force
A mind well lodged, and masculine of course.
Cowper.

We can have no idea of a natural power, which could project a sun out of chaos, except by comparing it to the explosions or earthquakes owing to the sudden evolution of aqueous or of other more *elastic* vapours; of the power of which, under immeasurable degrees of heat and compression, we are yet ignorant. *Darwin.*

ELASTIC GUM, or ELASTIC RESIN. See GUM, ELASTIC.

ELASTIC VAPORS are such as may, by any external mechanical force, be compressed into a smaller space than they originally occupied; restoring themselves, when the pressure is taken off, to their former state, with a force exactly proportioned to that with which they were at first compressed. Of this kind are all the aërial fluids, without exception, and all kinds of fumes raised by heat, whether from solid or fluid bodies. Of these some retain their elasticity only when a considerable degree of heat is applied to them, or to the substances which produce them; while

others remain elastic in every degree of cold, either natural or artificial, that has been observed. Of the former kind are the vapors of water, spirit of wine, mercury, sal ammoniac, and all kinds of sublimable salts; of the latter, those of spirit of salt, mixtures of vitriolic acid and iron, nitrous acid, and various metals; and, in short, the different species of aërial fluids indiscriminately. The elastic force with which any one of these fluids is endowed, has not yet been calculated, being ultimately greater than any obstacle we can put in its way. Thus, if we compress the atmospherical air, we shall find that, for some little time, it will easily yield to the force we apply; but every succeeding moment the resistance will become stronger, and a greater and greater force must be applied in order to compress it farther. As the compression goes on, the vessel containing the air becomes hot; but no power whatever has yet been able to destroy the elasticity of the continued fluid in any degree; for, upon removing the pressure, it is always found to occupy the very same space that it did before. The case is the same with aqueous steam, to which a sufficient heat is applied to keep it from condensing into water. This will yield to a certain degree; but every moment the resistance becomes greater, until at last it will overcome any obstacles whatever. An example of the power of this kind of steam we have every day in the steam engine; and the vapors of other matters, both solid and fluid, have frequently manifested themselves to be endowed with an equal force. Thus the force of the vapors of spirit of wine has occasioned terrible accidents when the worm has been stopped, and the head of the still absurdly tied down to prevent an explosion; the vapors of mercury have burst an iron box; and those of sal ammoniac, volatile salts, nitrous acid, marine acid, phosphorus, &c., have all been known to burst the chemical vessels which confined them, in such a manner as to endanger those who stood near them. In short, from innumerable observations, it may be laid down as an undoubted fact, that there is no substance whatever capable of being reduced into a state of vapor, but what in that state is endowed with an elastic force ultimately superior to any obstacle we can throw in its way. It has been a desideratum among philosophers to give a satisfactory reason for this astonishing power of elasticity in vapor, which is seemingly so little capable of accomplishing any great purpose when in an unconfined state. As air is that fluid in which, from the many experiments made upon it by the air-pump and otherwise, the elastic property has most frequently been observed, the researches of philosophers were at first principally directed towards it. The causes they assigned, however, were very inadequate; being founded upon an hypothesis concerning the form of the particles of the atmosphere itself, which they supposed to be either rolled up like the springs of watches, or that they consist of a kind of elastic flakes. This was followed by another hypothesis concerning their substance, which was imagined to be perfectly elastic, and so strong that it could not be broken by any mechanical power whatever; and thus they thought the phenomenon of the elasticity of the air might be explained. But an insuperable difficulty still attended their scheme, notwithstanding both these suppositions; for it was observed, that the elastic power of the air was augmented, not only in proportion to the quantity of pressure it was made to endure, but in proportion to the degree of heat applied to it at the time. Sir Isaac Newton was aware of this difficulty; and justly concluded that the phenomena of the air's elasticity could not be solved on any other supposition, than that of a repulsive power diffused all around each of its particles, which became stronger as they approached, and weaker as they removed from each other. Hence, the common phenomena of the air-pump and condensing-engine received a satisfactory explanation; but still it remained to account for the power shown in the present case by heat, as it could not be denied that this element had a very great share in augmenting the elasticity of the atmosphere, and seemed to be the only cause of elasticity in other vapors. It does not appear that Sir Isaac entered into this question, but contented himself with attributing to heat the property of increasing repulsion, and ascribing this to another unexplored property called rarefaction. Thus matters stood till the great discovery made by Dr. Black, that some bodies have the power of absorbing in an unknown manner the element in question, and parting with it afterwards, so that it flows out of the body which had absorbed it, with the very same properties that it had before absorption. Hence, many phenomena of heat, vapor, and evaporation, were explained in a manner much more satisfactory than had ever been attempted, or even expected before. One of these was that remarkable property of metals becoming hot by hammering; during which operation, in the doctor's opinion, the element of heat is squeezed out from between the particles of the metal, as water is from the pores of a sponge by pressing it between the fingers. Of the same nature is the phenomenon above-mentioned, that air when violently compressed becomes hot, by reason of the quantity of more subtile element squeezed out from among the particles. In this manner it appears, that heat and the repulsive power of Sir Isaac Newton are the very same; that by diminishing the heat of any quantity of air, its elasticity is effectually diminished, and it will of itself shrink into a smaller space as effectually as by mechanical pressure. In one case we have what may be called ocular demonstration of the truth of this doctrine, viz. that by throwing the focus of a strong burning lens upon a small quantity of charcoal in vacuo, the whole will be converted into inflammable air, having even a greater power of elasticity than common air in an equal degree of heat. Here there is nothing else but heat or light to produce the elastic power, or cause the particles of charcoal, which before attracted, now to repel each other. In another case we have evidence equally strong, that the element of heat by itself, without the presence of that of light, is capable of producing the same effect. Thus when a phial of ether is put into the receiver of an air-pump, and sur-

ounded by a small vessel of water, the ether oils violently, and is dissipated in vapor, while ie water freezes, and is cooled to a great degree. he dissipation of this vapor shows that it has a elastic force; and the absorption of the eat from the water shows, that this element ot only produces the elasticity, but actually nters into the substance of the vapor itself; so at we have not the least reason to conclude at there is any other repulsive power by which ie particles are kept at a distance from one ano-ier, than the substance of the heat itself. In hat manner it acts, we cannot pretend exactly explain, without making hypotheses con-rning the form of the minute particles of mat-r, which must always be very uncertain. All nown phenomena, however, concur in rendering e theory now laid down extremely probable. he elasticity of the steam of water is exactly roportioned to the degree of heat which flows to it from without; and, if this be kept p to a sufficient degree, there is no mechanical ressure which can reduce it into the state of ater. This, however, may very easily be done y abstracting a certain portion of the latent heat contains: when the elastic vapor will become a ense and heavy fluid. The same thing may be one in various ways with the permanently elastic uids. Thus the purest dephlogisticated air, hen made to part with its latent heat, by urning with iron, is converted into a gravi-ting substance of an unknown nature, which dheres strongly to the metal. If the decompo-tion is performed by inflammable air, both to-ether unite into a heavy, aqueous, or acid fluid; by mixture with nitrous air, still the heat is iscernible, though less violent than in the two rmer cases. The decomposition indeed is slower, ut equally complete, and the dephlogisti-ated air becomes part of the nitrous acid, from hich it may be again expelled by proper means: ut of these means heat must always be one; for us only the elasticity can be restored, and the ir be recovered in its proper state. The same ing takes place in fixed air, and all other per-anently elastic fluids capable of being absorbed y others. The conclusion therefore, which we an only draw from what data we have, concern-ig the composition of elastic vapors, is, that all f them are formed of a terrestrial substance, nited with the element of heat in such a man-er, that part of the latter may be squeezed out om among the terrestrial particles; but in such manner, that, as soon as the pressure is taken ff, the surrounding fluid rushes in, and expands iem to their original bulk: and this expansion r tendency to it will be increased in proportion o the degree of heat, just as the expansion of a ponge would be exceedingly augmented, if we ould contrive to convey a stream of water into ie heart of it, and make the liquid flow out with iolence through every pore in the circumference. n this case, it is evident that the water would act s a power of repulsion among the particles of ie sponge, as well as the fire does among the articles of the water, charcoal, or whatever other ubstance is employed. Thus far we may reason om analogy, but in all probability the inter-al and essential texture of these vapors will or ever remain unknown. It has been imagined by some, that the artificial elastic fluids have not the same mechanical property with common air, viz. that of occupying a space inversely proportional to the weights with which they are pressed: but this is found to be a mistake. All of them likewise have been found to be non-conductors of electricity, though probably not all in the same degree. See AIR and ELECTRICITY.

ELASTICITY. The cause or principle of elasticity, or springiness, is variously assigned. The Cartesians account for it from the materia subtilis making an effort to pass through pores that are too narrow for it. Other philosophers, in lieu of the subtile matter, substitute ether, or a fine etherial medium that pervades all bodies. Others, setting aside the precarious notion of a materia subtilis, account for elasticity from the great law of attraction, or the cause of the cohesion of the parts of solid and firm bodies. Thus, say they, when a hard body is struck or bent, so that the component parts are moved a little from each other, but not quite disjointed or broken off, or separated so far as to be out of the power of that attracting force whereby they cohere; they must certainly, on the cessation of the external violence, spring back to their former natural state. Elasticity has also been resolved into the pressure of the atmosphere: for a violent tension, or compression, though not so great as to separate the constituent particles of bodies far enough to let in any foreign matter, must yet occasion many little vacuola between the separated surfaces; so that upon the removal of the force they will close again by the pressure of the aërial fluid upon the external parts. See ATMOSPHERE. Lastly, others attribute the elasticity of all hard bodies to the power of resilition in the air included within them: and so make the elastic force of the air the principle of elasticity in all other bodies. These are clearly the mere conjectures of philosophy.

M. Libes, the author of the Nouveau Dictionnaire de Physique, has in that work given a new explication of the phenomena of elasticity, which depends upon the following principles:—

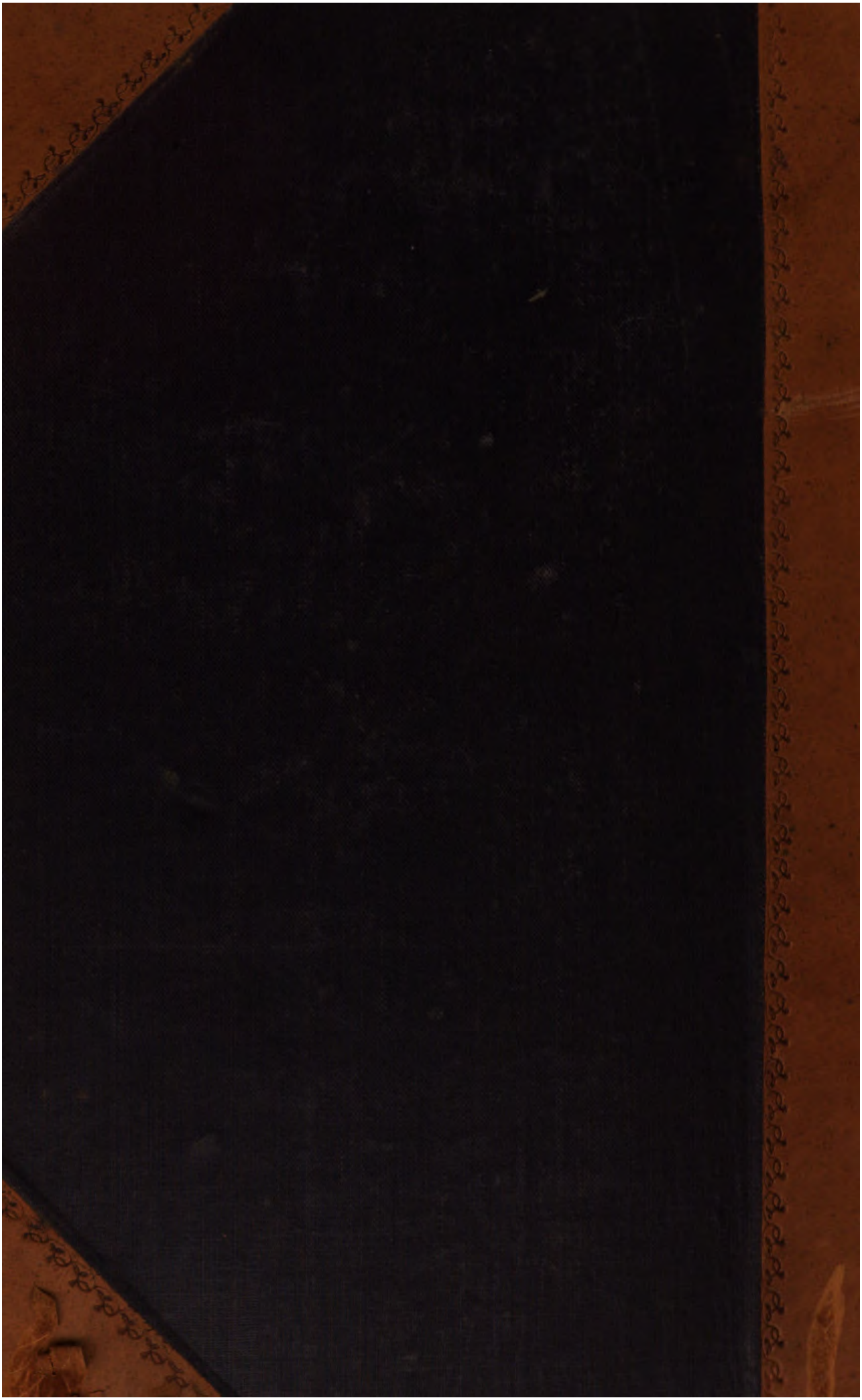
1. The signs of elasticity suppose a compression effected, that is, an alteration in the figure of bodies produced by the mutual approach of the moleculæ: whence it results, that bodies, whose moleculæ yield with a very great facility to the slightest pressure, so as to roll one over another without changing their figure, cannot give sensible signs of elasticity. Such in general are liquids. 2. When an elastic body is compressed, some of its integrant moleculæ are brought nearer to one another, while others undergo a farther separation nearly equal to the approach of the former. 3. At the habitual degree of heat and pressure which we experience, all bodies have a volume determined by the ratio of equality, which exists between the attractive force of their particles, and the repulsive force communicated by the caloric combined with those particles.

These being granted, the re-establishment of solid bodies, after the compression, appears to be the result of the combined action of the caloric and of attraction. For in the moleculæ brought nearer by the compression, the repulsive force augments, and the attractive force likewise aug-

ments; but the augmentation of the former force exceeds that of the latter. For, at the epoch of the formation of the body, such as it existed previous to the compression, the repulsive force communicated to its moleculæ by the caloric, was sufficient to give the degree of separation that was peculiar to the body: it was, therefore, superior to the attractive force until the moment when the moleculæ had become so far separated as was consistent with the natural state of the body. Whence it results, that if the particles are brought nearer together by compression, that is, if they are contracted with the caloric into a smaller space, the ratio of equality which subsisted between the attraction and the repulsion before the compression, must be destroyed in favor of the repulsion; and consequently, on the cessation of the compression, this surplus of repulsive force will act so as to separate again the moleculæ brought nearer by the compression, until the equilibrium is re-established between the attraction and the repulsion: and this equilibrium can only be re-established, when the molecules have recovered the degree of separation which they had previous to the compression. For similar reasons the attraction will predominate over the repulsion in those particles which have suffered a farther separation than is due to the natural state: it must, therefore, act to draw the particles nearer, and re-establish the equilibrium of those forces: and this equilibrium cannot be re-established until the molecules have recovered the relative distance which they had before the compression.

This theory M. Libes applies to an elastic sphere, as an ivory ball when falling upon a plane, to a plate of steel, whose extremities are brought towards each other by bending, and to the known effects of tempered metals, &c. In explaining the elasticity of aëriform fluids, M. Libes calls in to his aid a new force. For, in this kind of substances, the repulsion having prevailed over the attraction, their particles are retained in their mutual position by the pressure of the atmosphere. But this force, it may be observed, being constant, makes no change in the results just stated; except that, if the pressure be taken away, the particles of the gas will be separated from one another, until their relative distance attains a point determined by the equality between the attraction of the earth and the repulsion of those particles. Now, since all bodies contain caloric, it may be asked how it happens that all bodies are not elastic, if caloric be the principle of elasticity?

To this M. Libes replies by the following remarks:—1st. Since there is not in nature any body, either perfectly hard, or perfectly soft, there is none but what possesses some degree of elasticity. 2dly. Perceptible signs of elasticity suppose the compression effected: it is not therefore surprising, that bodies in which we cannot produce compression should not give any sign of elasticity. 3dly. Although caloric be the principle of elasticity, it does not follow that all bodies which contain caloric must exhibit this property. 1. Too much or too little caloric may equally weaken the elastic force. The different forms which distinguish the integrant moleculæ of different bodies; the different arrangement assumed by those moleculæ, according to circumstances, may be sometimes more or less favorable, at others more or less prejudicial to elasticity. 2. Soft bodies, such as butter, humid clay, &c., experience in their soft state a commencement of solution by water, which must alter the repulsive force of their moleculæ, and consequently hurt the elasticity. This is so true, that these bodies, freed from their aqueous parts, without changing their temperature, yield sensible signs of elasticity.

M. Libes, instead of attempting to explain, as some would expect, why caloric is elastic, says it is not necessary to suppose it so. For it may communicate this property to other bodies without being so itself. This position he illustrates as follows: when dry bread is immersed in water, that bread becomes swoln, its particles being farther separated from one another: water, therefore, by penetrating the pores of the bread, communicates to its particles a repulsive force; yet it would be ridiculous to conclude from hence, that the moleculæ of water mutually repel one another. In like manner, when we subject a body to the action of heat, its integrant molecules are separated from one another, and acquire a repulsive force by their combination with caloric: but this phenomenon, like the preceding, depends probably upon the concourse of several attractive forces, such as that of the moleculæ of the caloric, that of the particles of the body for one another, and, lastly, the reciprocal attraction of the particles of the caloric and those of the body penetrated by that fluid: whence it results that the elasticity of bodies by no means presupposes that of the caloric which has given rise to it. Indeed, M. Libes does not regard as completely demonstrated the existence of the fluid called caloric; he assumes the hypothesis as a matter of convenience, which enables us to abridge the language of philosophical discussions, and to found upon our reasonings an analytical calculus. He next, therefore, proceeds to state his theory analytically; and deduces from his formulæ the following results among others. 1. That when we compress elastic fluids, the repulsive force becomes more powerful than the attractive, and consequently when the compression ceases, the moleculæ ought to return towards their first position. 2. That liquids and aëriform fluids have the exclusive privilege of assuming a larger volume when the pressure of the atmosphere is taken away. *Dict. de Phys. Retrospect*, No. 8.

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